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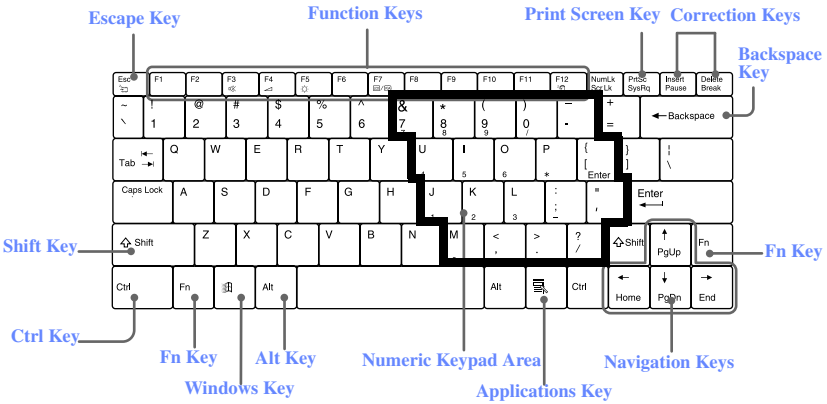
Using Your VAIO® Notebook

Using the Keyboard

Although the notebook keyboard is very similar to that of a typewriter, the keyboard has additional keys that perform specific computer-related tasks.

Keyboard



The Notebook Keyboard Keys

Key	Description
Numeric keypad area	The numeric keypad area contains the keys found on a typical calculator. Use this area to type numbers or to perform mathematical calculations such as addition and subtraction. Note the following: ❑ To activate the numeric keypad, press the Num Lock key, which causes the Num Lock light to come on and remain on until the numeric keypad is deactivated. ❑ To deactivate the Num Lock key, press the Num Lock key again, which causes the Num Lock light to go off.
Navigation keys	The Left/Right/Up/Down arrows are devoted to move the cursor on the screen and also function as the Home, End, Page Up, and Page Down keys, respectively.
Correction keys	The Insert, Back Space, and Delete keys enable you to make corrections in your documents.
Function keys	The 12 function keys along the top of the keyboard are used to perform designated tasks. For example, in many applications, F1 is the Help key. The task associated with each function key may vary from one application to the next.
Escape key	The Esc (Escape) key is used to cancel commands.
Print Screen key	The Print Screen key takes an electronic snapshot of the screen and places it in the Windows Clipboard. You can then paste the screen shot into a document and print it.
Operator keys (Ctrl, Alt, Shift keys).	Several keys are always used with at least one other key: Ctrl, Alt, and Shift. When held down with another key, the Ctrl (Control) and Alt (Alternate) keys offer another way to give commands. For example, in many applications, instead of choosing the Save command from a menu, you can hold down Ctrl and press S (referred to as Ctrl+S). The Shift key operates the same way as on a typewriter; it is used to produce capital letters or special symbols such as @ and $.

Key	Description
Windows key	The key with the Windows logo displays the Windows Start menu; it is the equivalent of clicking Start on the task bar. See "The Windows Key in Combination with Other Keys" on page 11.
Fn key	The Fn keys at the left and right sides work the same and are used in combination with other keys to issue commands. See "The Fn Key in Combination with Other Keys" .
Applications key	The Applications key displays a shortcut menu of context-sensitive choices; pressing this key is the equivalent of clicking the right mouse button.

Indicators

Indicators	Functions
Power	Light is green when the notebook is powered on, flashes amber when the notebook is in Standby mode, and turns off when the notebook is in Hibernate mode or is powered off.
Battery	Indicates the status of the battery, which is attached at the rear of the notebook.
MG Memory Stick	Indicates the Memory Stick slot is in use.

Indicator Lights

Light	On	Off
Hard disk	Data is being read from or written to the hard drive. Do not enter Standby mode or turn off the notebook when this indicator light is on.	The hard drive is not being accessed.
Num Lock	The number keys in the numeric keypad are active.	The character keys in the keypad area are active.
Caps Lock	The letters appear in uppercase as you type. The Shift key lowers the case of typed letters when Caps Lock is on.	Letters appear in lower case as you type (unless you hold down the Shift key).
Scroll Lock	The screen scrolls differently. (Exactly how it scrolls depends on the specific application. It has no effect in many applications.)	Information moves across the display normally.

The Windows Key in Combination with Other Keys

Combinations	Functions
+ F1	Displays Windows Help.
+ Tab	Switches the selected button on the taskbar.
+ D	All displayed windows are temporarily minimized, and desktop is displayed; when pressed again, all minimized windows are opened.
+ E	Displays Windows Explorer.
+ F	Displays the Windows Find: All Files window to find a file or folder. This is the equivalent of selecting Find then Files or Folders from the Start menu.
+ Ctrl + F	Displays the Windows Find: Computer window where you can locate other computers. This is the equivalent of selecting Find then Computer from the Start menu.
+ M	Minimizes all displayed windows.
Shift + + M	Returns all minimized windows to their previous size.
+ R	Displays the Run window. This is the equivalent of selecting Run from the Start menu.
Fn + + Insert	Displays the Properties window. This is the equivalent of clicking the System icon in the Control Panel.

The Fn Key in Combination with Other Keys

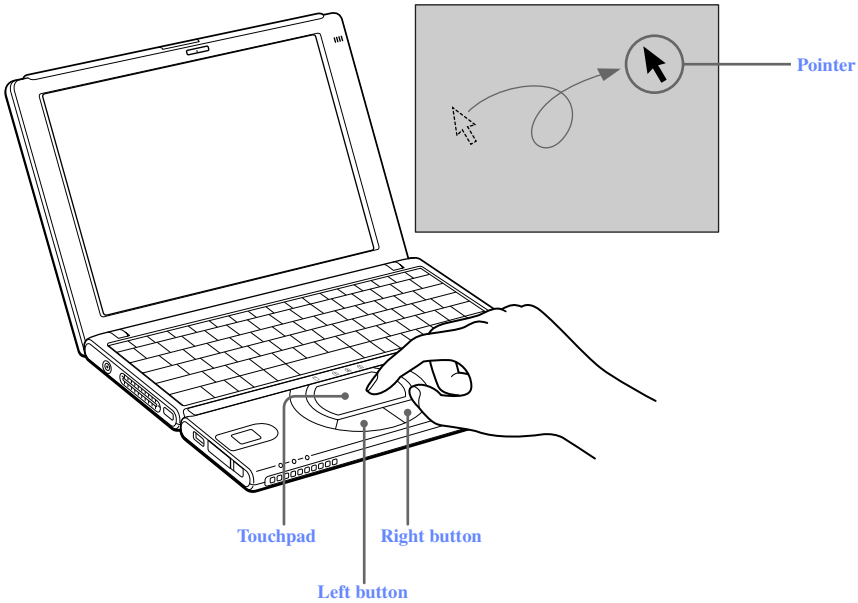
Combinations/ Feature	Functions
Fn+ (ESC) Standby	Puts the system in Standby mode, which is a power management state. To return the system to the active state, press any key or press the power switch on your notebook.
Fn+ (F3) Mute on/off	Toggles the built-in speaker off and on.
Fn+ (F4) Speaker volume	Adjusts the built-in speaker volume as follows: To increase volume, press Fn+F4, then ↑ or →. To decrease volume, press Fn+F4, then ↓ or ←.
Fn+ (F5) Brightness control	Adjusts the brightness of the LCD. To increase light intensity, press Fn+F5 then ↑ or →. To decrease light intensity, press Fn+F5 then ↓ or ←.
Fn+ LCD / VGA (F7) Switch to the external display	Toggles through the LCD, external display, and both LCD and external display. Only LCD → LCD and external display → Only external display → Only LCD
Fn+ (F12) Hibernate	Puts the system in Hibernate mode, which is the lowest level of power consumption. When you execute this command, the states of the system and the peripheral devices are written to the hard disk and the system power is turned off. To turn the power back on and return the system to the original state, press the power switch on your notebook.
Fn+B Mega-Bass switch	Toggles the mega-bass function off and on. This feature is available with headphone only.

✍ You can also carry out these functions using the Jog Dial control. Some functions are not available until Windows launches.

Using the Touchpad

The keyboard contains a cursor-pointing device called a touchpad. You can point to, select, drag, and scroll objects on the screen using the built-in touchpad.

Touchpad



Actions	Descriptions
Point	Slide one finger on the touchpad to place the pointer on an item or object.
Click	Press the left button once.
Double-click	Press the left button twice.

Actions	Descriptions
Right-click	Press the right button once. In many applications, this action displays a shortcut menu of context-sensitive choices.
Drag	Slide one finger while pressing the left button.
Scroll	Move your finger along the right edge of the touchpad to scroll vertically. Move your finger along the bottom edge to scroll horizontally. (The scroll function is available only with applications that support a touchpad scroll feature.)

✍ See Mouse Properties for information on touchpad features, such as clicking both buttons simultaneously, adjusting touchpad speed, Web Assist, Tap Off, and Easy Launcher functions. To access Mouse Properties, click Start on the Windows taskbar, point to settings, select Control Panel, and click the Mouse icon.

Using the Optical Drive

It is recommended that you use a Sony compatible DVD drive, for optimal performance.

⚠ **If you connect a non-Sony DVD drive to your VAIO notebook, the DVD playback may not function properly. The bundled DVD software must be installed to play a DVD.**

If you connect an optical drive (not supplied) when your notebook is running on battery power, the battery life will be shorter. The drive draws power from the notebook through a PC card.

✍ Procedures for connecting the CD drive may vary, depending on the CD drive. See the manual that came with your CD drive for more information on use.

(Windows 2000 only) To play an audio CD in the optical drive, your notebook's settings must be set properly. You can check the settings as follows:

1. Click the Start button, point to Settings, and then click Control Panel.
2. Double-click the System icon.
3. Click the Hardware tab and then click Device Manager.

4 Double-click the drive you use under CD-ROM drive.

5 Click the Property tab and make sure the “Enable digital CD audio for this CD-ROM device” box is checked.

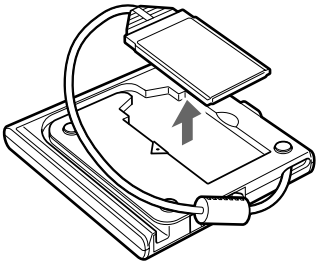
To Connect the optical Drive

✍ You can connect the optical drive while the notebook is on, unless you plan to use the System Recovery CDs. Turn off your notebook before using the System Recovery CDs.

1 Remove the PC card slot protector from the PC card slot. See “Using PC Cards” for details.

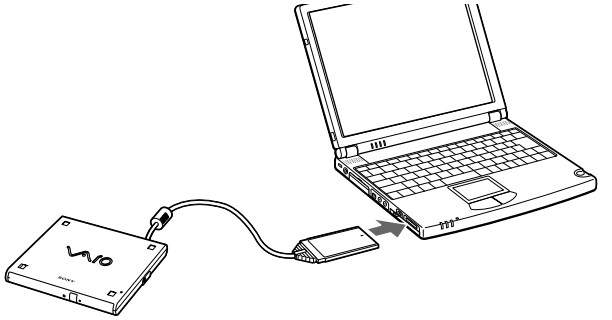
2 Remove the PC card from the bottom side of the CD drive.

Removing the PC Card



3 Insert the PC card into the PC card slot with the SONY logo facing up. See “Using PC Cards” for details.

Inserting the PC Card

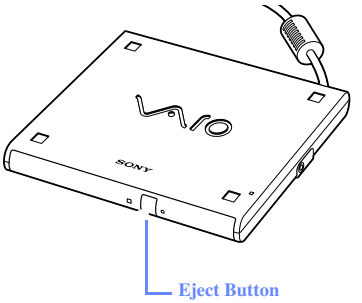


A protective cover is attached to the lens of the CD-ROM drive at the factory. Before using the CD-ROM drive, remove this protective cover.

To Insert a Disc

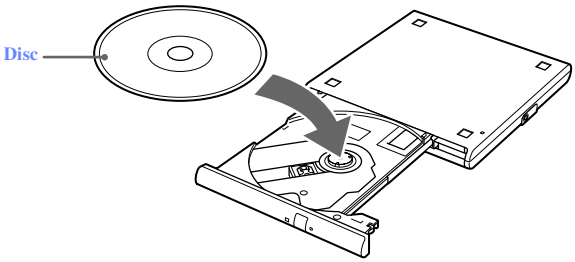
1 Press the Eject button. The disc tray slides out.

Using the CD-ROM Drive



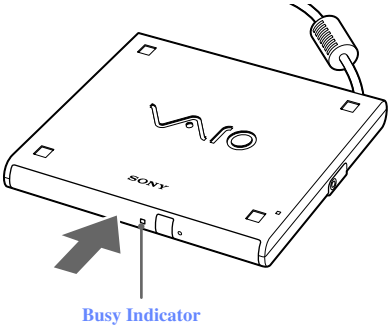
2 Place the disc in the tray with the label side facing up. Push the disc onto the hub until the disc clicks into place.

Inserting a Disc



3 Close the tray by pushing it gently. The BUSY indicator on the drive flashes while your notebook is reading data from the disc.

The Flashing BUSY Indicator



To Remove the Drive

Remove the PC card from the notebook. See “Using PC Cards” for details.

Notes on CD Media

- Do not touch the surface of the disc.
- Do not drop or bend the disc.
- Do not use adhesive labels to identify the disc. The label may come off while the disc is in use in the optical drive and cause the drive to malfunction.

- Fingerprints and dust on the surface of a disc may cause read errors. Proper care of the disc is essential to maintain its reliability. Do not use solvents such as benzine, thinner, commercially available cleaners or anti-static spray, as they may cause damage to the disc.
- For normal cleaning, hold the disc by its edge and use a soft cloth to wipe the surface from the center out.
- If the disc is badly soiled, moisten a soft cloth with water, wring it out well, and use it to wipe the surface of the disc from the center out. Wipe off any remaining moisture with a dry soft cloth.

Using PC Cards

Your notebook includes a PC card slot. PC cards allow you to connect portable external devices, such as a CD-ROM drive.

✍ The PC card slot can accommodate one Type I or Type II PC card. This slot is compatible with 16 bit card and Card Bus. ZV (Zoomed Video) port is not available.

Some PC cards require that you disable idle devices when using the PC card. You can use Sony Notebook Setup to disable devices. See “Displaying the Sony Notebook Setup Screen” for details.

Be sure to use the most recent software driver provided by the PC card manufacturer.

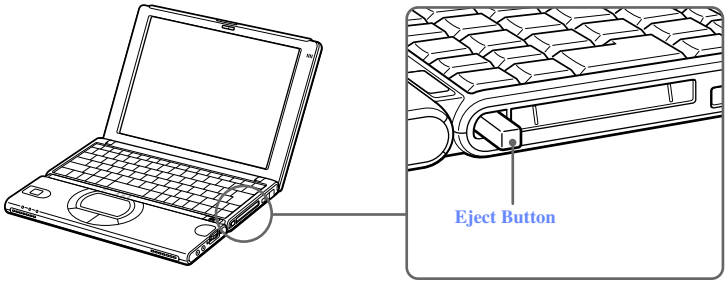
If an “!” mark appears on the Device Manager tab in the System Properties dialog box, remove the software driver then reinstall it.

To Insert a PC Card

✍ You do not need to shut down the notebook before inserting or removing a PC card.

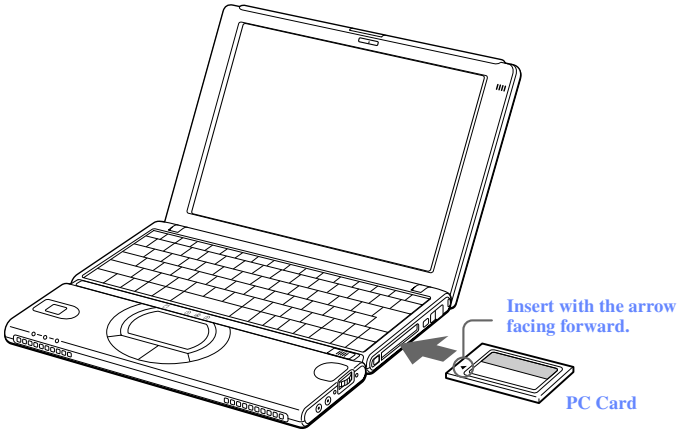
1 Insert the PC card in the PC card slot with front label facing up.

Eject Button



2 Gently push the card into the slot until the card is fixed into the connector.

Inserting a PC Card



✍ Do not force a PC card into the slot, as this may damage the connector pins.
If you have difficulty inserting a card, check that you are inserting the card with the correct orientation.
Do not carry your notebook while the head of the PC card (such as a wireless LAN card) is out of the slot. Pressure or shock may damage the connector pins.
If you alternate between normal power operation and the Standby or Hibernate power management modes while the card is inserted, a device connected to your system may not be recognized. In such case, reboot your system.

See the manual that came with your PC card for more information on its use.

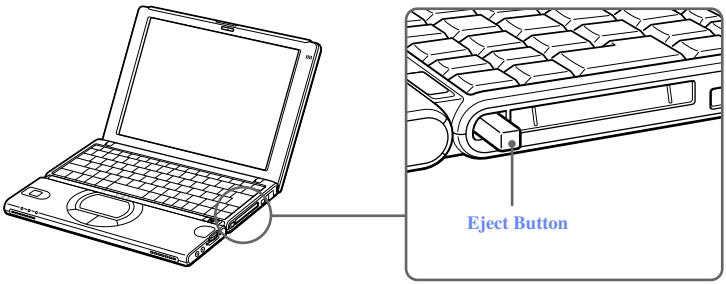
To Remove a PC Card When the Notebook is on.

If you do not perform the following procedure for removing the PC card from the your notebook while the notebook is turned on, your notebook system may crash and data not previously save may be lost.

If your notebook is turned off, do not perform this procedure.

1. Close any application that uses the PC card, otherwise data may be lost.
2. Double-click the "Unplug or Eject Hardware" icon in the taskbar to access the "Unplug or Eject Hardware" dialog box, and select the PC card.
3. Click Stop to access the "Stop a Hardware device" dialog box, and confirm that the PC card is selected, then click OK.
4. The message “PC Card can now be safely removed from the system” appears. Click OK.
5. Close the "Unplug or Eject Hardware" window.
6. Pull the PC card release button up and press it in towards the notebook.

Removing a PC Card



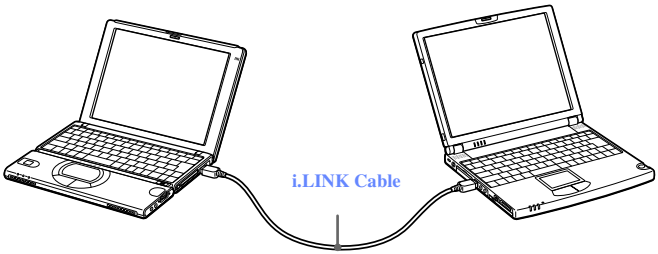
7. Gently grasp the card and pull it out.
8. Insert the PC card slot protector into the empty slot.

Using i.LINK® Network Connection

Windows Me™

You can connect your VAIO® notebook to another VAIO Notebook that has the Windows Me operating system or the Sony Smart Connect 3.0 software preinstalled. You may use an i.LINK® cable (optional) to connect the two systems then use one notebook to edit, copy, or delete files on the other notebook. You can also print from a printer that is attached to either notebook. Select the STD mode in Smart Connect 3.0 software to connect with another notebook that has Windows Me preinstalled.

Connecting with an i.LINK Cable



Windows 2000

The preinstalled Smart Connect software allows you to use an i.LINK® cable (optional) to connect your VAIO notebook to another VAIO notebook that also has Smart Connect or Windows Me preinstalled. You can then use one notebook to edit, copy or delete files on the other notebook. You can also print from a printer attached to either notebook.

See Smart Connect online help for more information.

* i.LINK is a trademark of Sony used only to designate that a product contains an IEEE 1394 connection. The i.LINK connection may vary, depending on the software applications, operating system, and i.LINK-compatible devices. All products with an i.LINK connection may not communicate with each other. Refer to the documentation that came with your i.LINK-compatible device for information on operating conditions and proper connection. Before connecting i.LINK-compati-ble PC peripherals to your system, such as a CD-RW or hard disk drive, confirm their operating system compatibility and required operating conditions.

✍ When you connect two VAIO notebooks, you must assign each notebook a unique name by which it will be identified when the two notebooks are networked together.

✍ If you have previously purchased a VAIO computer or notebook that does not have the Windows Me operating system or Smart Connect 3.0 software preinstalled, consult the Sony website for support options (http://www.sony.com/pcsupport).

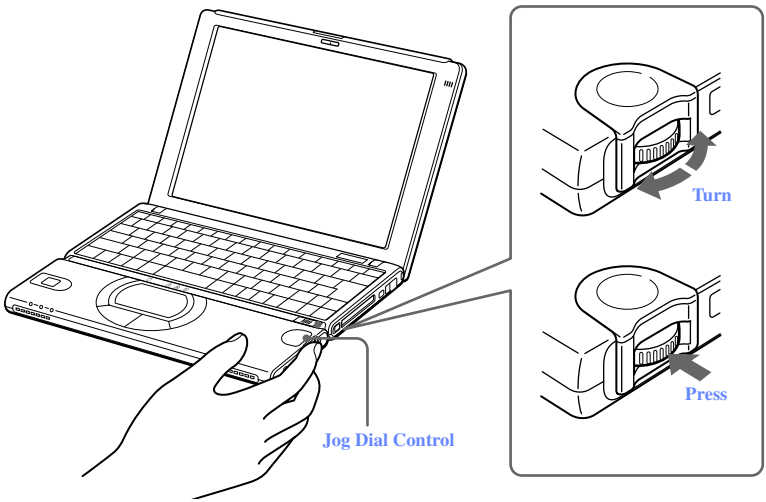
The Jog Dial™ Control

This section explains how to use the Jog Dial control. For information on how to change the Jog Dial control settings, right-click the Jog Dial control icon in the task tray and click Help Topics.

Using the Jog Dial™ Control

Your notebook is equipped with a Jog Dial control on the right side of the unit. The Jog Dial control enables you to open an application, folder, or document from a predefined list by rotating and pressing the Jog Dial control. In addition, when you press the Jog Dial control, you can turn on your notebook automatically and start the selected application or document.

Jog Dial Control



The Jog Dial control window always appears in the display. It is either in the launcher mode or in the guide mode.

Launcher Mode

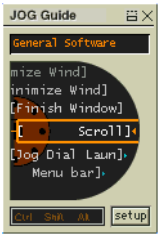
The Jog Dial control window is in launcher mode until a software application is launched or the Jog Dial control window becomes active. When an arrow is displayed next to an item in the Jog Dial control window, you can display a submenu of that item by selecting it and pressing the Jog Dial control button.

Using Launcher Mode

To use the Jog Dial control, click the Jog Dial control window or the Jog Dial control icon in the task tray. Alternatively, you can press the Jog Dial control on the keyboard to switch to the launcher mode.

1 Turn the Jog Dial control to select the item you want, then press the Jog Dial control. The window switches to the guide mode, and shows the Jog Dial's function.

Jog Guide Dialog Box



2 Turn or press the Jog Dial control to use the desired function.

3 To select another item, switch to the launcher mode and repeat from step 1.

Guide Mode

The Jog Dial control window is in the guide mode when software is in use and the software window is active. Depending on the software you are using, you can select items from the displayed list using the Jog Dial control. Some Sony software applications have two modes in List View, Simple Menu and Full Menu. You can switch the mode by pressing the shift key while turning the Jog Dial control.

Using Guide Mode

The Jog Dial control window displays the Jog Dial's function.

Using the Jog Dial Control with Sony Software

If Sony software that supports the Jog Dial control is active, you can use the Jog Dial's functions that are allocated to that software. For more information on functions allocated to software, see the software applications online Help.

Using the Jog Dial Control with Other Software

If the software you are using does not support the Jog Dial control, you can still perform the following functions:

Action	Description
Maximize or Minimize Window*	Press the Jog Dial control button to maximize the size of the active window. Press again to minimize or return to normal window size.
Finish Window*	Press the Jog Dial control button to close the active application.
Scroll	Press the Jog Dial control button to begin scrolling within the active window.
Jog Dial Launcher	Press the Jog Dial control button to return the Jog Dial control to Jog Launcher mode.
Menu Bar	Press the Jog Dial control button, then use the Jog Dial control to scroll through the active window's toolbar.

*Some software does not support these functions.

Using a Dialog Box

When a window such as Screen Properties is active, the Dialog box is displayed in the Jog Dial window. You can select an item in the window by rotating the Jog Dial control. Pressing the Jog Dial control is the equivalent of pressing Enter.

Jog Guide Dialog Box

VAIO Action Setup

VAIO Action Setup manages the settings for your notebook's Jog Dial™ control, Memory Stick® media, and i.LINK® interface. An overview of some of the functions controlled by VAIO Action Setup is provided. For more information on changing the settings using VAIO Action Setup, right-click the Jog Dial control icon or , in the task tray and click Help Topics.

Using Memory Stick® Media

This new compact, portable, and versatile recording medium has a data capacity exceeding that of a floppy disk. The media is specially designed for exchanging and sharing digital data with compatible products. Because it is removable, the media can be used for external data storage.

Types of Memory Stick Media

Two types of Memory Stick media are available. The first type, MagicGate™ (hereafter referred as MG Memory Stick media), is provided with copyright protection. The second type, simply referred to as Memory Stick media, does not have the same copyright protection as MagicGate media.

You can use both media with your notebook.

For music, which requires copyright protection, you can only use MG Memory Stick media with your notebook. You can also use MagicGate-compatible devices to record and playback music when they are connected to your notebook.

You can store mixed data on the Memory Stick media. For example, you can copy an image on to MG Memory Stick media that already contains music.

What is MagicGate?

MagicGate is copyright protection that consists of authentication and encryption technology. Authentication technology ensures that protected content is only transferred between compliant devices and media. Protected content is recorded and transferred in an encrypted format to prevent unauthorized duplication or playback.

✍ Ensure that the MG Memory Stick media has the MG mark MG.

Handling and Storing Memory Stick Media

Follow these guidelines when handling and storing Memory Stick media.

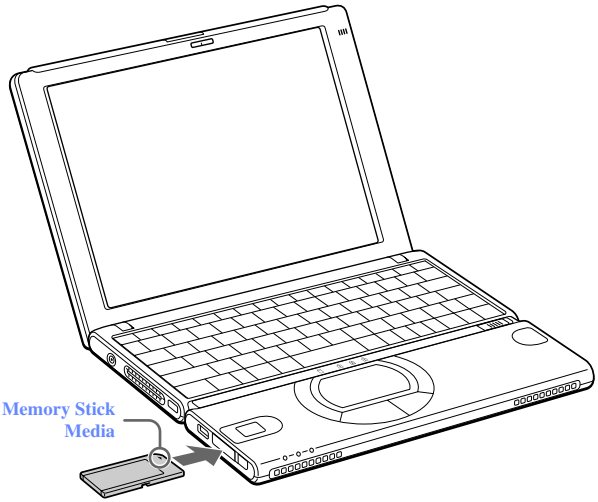
- Do not touch the contacts on a Memory Stick media with your fingers or any metal object.
- Use only the labels provided with a Memory Stick media. Do not attach other labels to it.
- Handle the media carefully. Avoid dropping, bending, or subjecting it to shock or vibration.
- Do not attempt to disassemble the Memory Stick media.
- Do not allow the media to get wet.
- Avoid using or storing the Memory Stick media in any of the following:
  - Locations subject to high temperatures or direct sunlight (i.e. the interior of a vehicle parked in bright sunlight).
  - Locations exposed to high humidity or corrosive substances.
  - Locations that are subject to static electricity or electrical noise generated by large appliances or office equipment.
- When transporting or storing a Memory Stick media, always use its storage case.

- Always backup important data that is stored on a Memory Stick media.
- Do not remove the media when the indicator light is on.
- Only MG™ Memory Stick media can be used with copyright protected data like music.

Inserting a Memory Stick Media

Insert the Memory Stick media into the media slot on the left side of the notebook until it clicks into place. When the Memory Stick media is properly in place, Sony VisualFlow™ will automatically launch to display the contents of the Memory Stick.

Inserting a Memory Stick Media



Hold the Memory Stick media with the arrow pointing toward the slot. To avoid damaging the notebook or the Memory Stick media, do not force the media into the slot.

To confirm that the Memory Stick media is inserted correctly, check the Removable Disk (S:) drive.

To check the drive:

1 Double-click the My Computer icon on the desktop.

2 Check that the Removable Disk (S:) icon is displayed in the My Computer window.

3 Double-click the Removable Disk (S:) icon to display the contents of the Memory Stick media.

✍ If you cannot find the Removable Disk (S:) icon, take the following steps.

Double-click the System icon in Control Panel. Device Manager appears. If you cannot find the icon that you are looking for, click "Display all the options of the Control Panel."

Click the Refresh button.

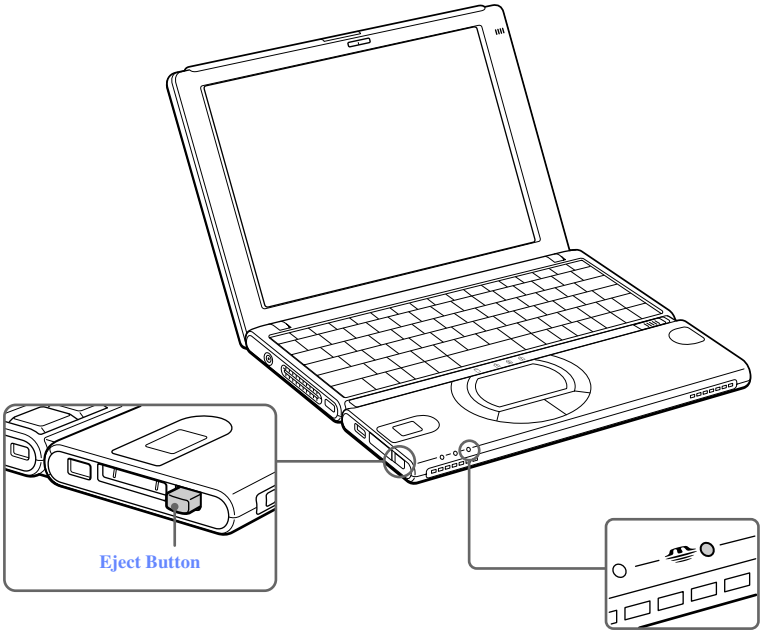
Removing a Memory Stick Media

1 Ensure that the Memory Stick media indicator light is off.

2 Push in the Memory Stick media eject button.

3 When the button ejects, push it again and remove the Memory Stick media.

Removing a Memory Stick Media



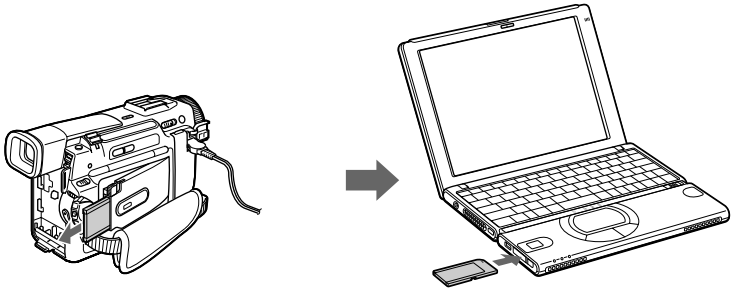
Large image files require more time to load to a Memory Stick media.

Using Memory Stick Media with Data from Another Device

Memory Stick media can be used with compatible devices like a Sony digital video camera recorder or digital still camera. Insert the media into the Memory Stick media slot and save your movie or still image as data files to the Memory Stick media. Use Sony's PictureGear™ software (preinstalled with your notebook) to move the files to a Memory Stick media.

For more details on using compatible devices with MG Memory Stick media, refer to the instructions that came with your compatible device, or use PictureGear Help.

Using a Compatible Device

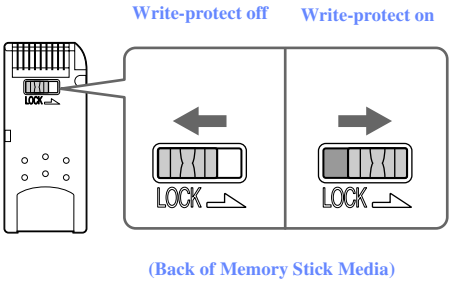


Write-Protecting a Memory Stick Media

Memory Stick media is designed with a write-protect tab to protect valuable data from accidental erasure or overwriting. Move the tab to the right or left to set or release write-protection.

Write-protect off	Data can be saved on the Memory Stick media.
Write-protect on	Data can be read from but not saved on the Memory Stick media.

Using the Write-protect Tab



(Back of Memory Stick Media)

Formatting a Memory Stick Media

Memory Stick media is formatted for immediate use when you purchase it. If you need to reformat a Memory Stick media, use the Memory Stick Formatter that is provided with the media. Follow the procedures included here. For more details about using Memory Stick Formatter, refer to Formatter Help.

Reformatting erases all current data that is stored on a Memory Stick media. Before you reformat, confirm that the media does not contain files you want to keep.

1. Insert the Memory Stick media into the notebook. See “Inserting a Memory Stick Media” on page 28 for details on inserting Memory Stick media.
2. Click the Start button, point to Programs, click Memory Stick Utility, and then click Memory Stick Formatter.
3. Click on the s: icon in the Memory Stick Formatter Window.
4. Click Start Formatter. Memory Stick Formatter begins.

Power Saving Modes

When you use a battery as the source of power for your notebook, you can take advantage of power management settings to conserve battery life. In addition to the normal operating mode, which allows you to turn off specific devices, your notebook has two distinct power saving modes: Standby and Hibernate. When using battery power, you should be aware that the notebook automatically enters Hibernate mode when the remaining battery charge drops to approximately 10%, regardless of the power management setting you select.

If your battery level falls to less than 10%, you should either attach the AC adapter to recharge the battery or shut down your notebook and insert a fully charged battery.

Normal Mode

This is the normal state of your notebook when it is in use. The green power indicator light is on in this mode. To save power, you can turn off a specific device such as the LCD or the hard disk.

See “Controlling Power Management” for more details.

Standby Mode

The notebook saves the current state of the system in RAM and switches off power to the CPU. The power indicator light flashes in amber while in this mode.

To activate Standby mode

Press Fn+Esc. You can also use the PowerPanel utility to enter Standby mode.

To return to normal mode

Press any key.

Hibernate Mode

The state of the system is saved on the hard drive and power is turned off. The power indicator light is off in this mode.

To activate Hibernate mode

To activate Hibernate mode, press the key combination Fn+F12.

✍ (Windows 2000 Professional) the “Save to Disk Manager” message appears, then the notebook enters Hibernate mode.

✍ Do not move the notebook until its power indicator light turns off.

To return to normal mode

Turn on the notebook by sliding the power switch forward. The notebook returns to its previous state.

✍ When returning from Hibernate mode, the system status stored on the hard disk is erased and the notebook starts normally if you slide the power switch forward and hold for more than four seconds.

- Time to return to normal mode:

  Standby requires less time than Hibernate.
- Power consumption:

  Standby uses more power than Hibernate.

Notes on Using Power Management

- If you find that an application exhibits unexpected behavior (such as reduced video quality) after returning from a power saving mode, you should close that application before your notebook enters a power saving mode.
- For maximum audio and video performance, use PowerPanel to select either the AC Power Profile or the Power Management Off profile.
- If your battery level falls to less than 10 percent, you should either attach the AC adapter to recharge the battery or shut down your notebook and insert a fully charged battery.
- When the internal backup battery is low on power, it may not be able to boot your system properly. You can correct this condition as follows:
  - Plug in the AC adapter and allow the notebook to charge for one hour while the power is on. Do not use the notebook during this time.
  - After one hour, turn the power off and then on again. To charge the internal backup battery fully, keep the AC adapter connected for more than 24 hours after turning the power on. You can use your notebook while charging the battery.
- The operating system may become unstable if a lower power state such as Hibernate is initiated and then changed before the operating system completely enters the lower power state. To restore the notebook to its normal operating stability, close all open applications, and slide the power switch forward and hold it there for four seconds or more to completely shut down the notebook.

Using a Phone Line

The Internal Modem

The notebook comes with an internal fax modem that allows you to exchange data by faxing through the Internet or faxing by connecting the notebook to the telephone line using a phone cable (optional).

The maximum communication speed of the internal modem (V.90, 56K) is 56 Kbps for data reception and 33.6 Kbps for data transmission. This speed may vary depending on the line conditions.

✍ The internal fax modem can only be connected to a subscriber telephone line. Do not connect it to a PBX (Private Branch Exchange). Connecting to the PBX may cause a major system malfunction.

Check the dialing mode of your telephone by pressing any button on your telephone while holding the receiver off the base unit. If you hear a tone sound, your dialing mode is the tone mode. If you hear a click sound, your dialing mode is the pulse mode. If you have a rotary-type telephone, your dialing mode is also the pulse mode.

Setting the Dialing Mode for the Modem

1. Click Start on the task bar, point to Settings, then point to Control Panel.
2. Click the Modems icon in the Control Panel. The Modems Properties dialog box displays (Windows Me).
   Click the Phone and Modem Options icon in the Control Panel. The Phone and Modem Options dialog box displays (Windows 2000).
3. Click Dialing Properties. The Dialing Properties dialog box displays (Windows Me).
   At the Dialing Rules tab, and then click Edit. The Edit Location dialog box displays (Windows 2000).
4. Select Tone or Pulse from Dialing Mode (Windows Me and Windows 2000).
5. Click OK to close the Dialing Properties or Edit Location dialog box and then click OK to close the Modems Properties or Phone and Modem Options dialog box.
6. Open the modular jack cover.

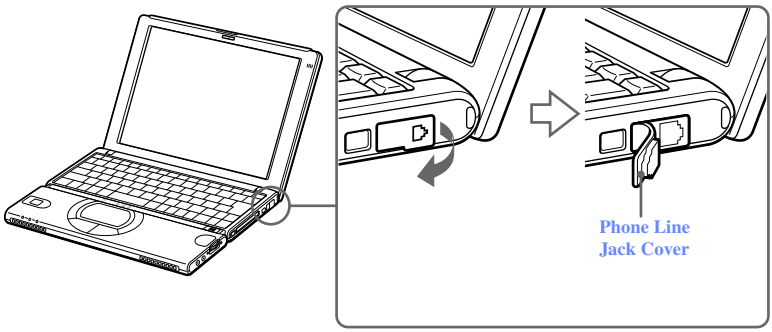
Connecting to the Telephone Line

You need to connect a phone line to take advantage of online services, the Internet, and Sony Customer Support.

✍ In order to register your notebook online, register your software, or use Sony Customer Support, you must connect to a phone line. You must also register your notebook to receive the extended warranty.

1 Gently peel back the rubber phone jack cover. Pulling the phone jack cover too hard could damage it.

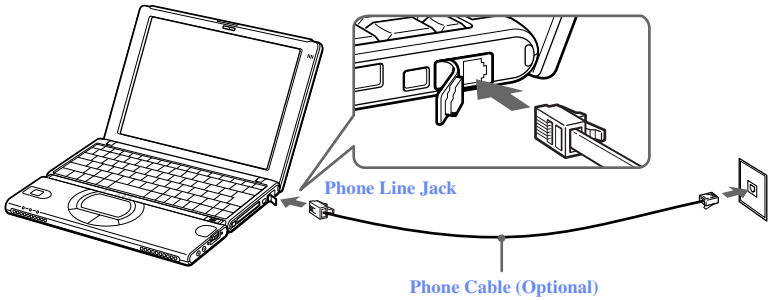
Opening the Phone Line Jack Cover



2 Plug one end of the phone cable (optional) into the jack on the inside of the phone line jack cover. Make sure you insert the phone cable from the rear of the notebook and that the modular jack clicks into place.

3 Plug the other end into the wall jack.

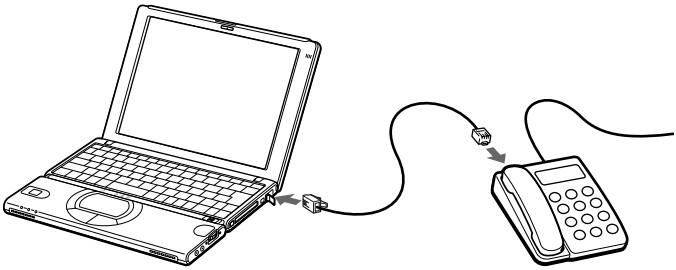
Plugging the Phone Line into Phone Line Jack



✍ Your notebook does not work with party lines, cannot be connected to a coin-operated telephone, and may not work with multiple phone lines. Some of these connections might result in excess electrical current and could cause a malfunction in the internal modem.

If your telephone has two modular jacks, connect it as illustrated below.

Telephone with Two Modular Jacks



Note: When you complete the connections, you must use your communication software to adjust the settings for your telephone, fax, and communication methods. For details on adjusting settings, refer to your communications software manual.

Notes on the Telephone Line

- The internal fax modem can be connected to the subscriber telephone line. Do not connect it to the PBX (Private Branch Exchange). Connecting to the PBX may cause a failure or fire.
- Some PBXs may use the same electric requirements as the subscriber telephone line of the local telephone company. Ask the manufacturer of your PBX or your PBX maintenance agent for compatibility.
- The internal modem of your notebook is set to hang up if the called party does not answer within 60 seconds. You may change this length to less than 30 seconds, which, however, may prevent a connection from being established due to some delays caused by the telephone switch. It is advised to set the length to 30 seconds or more.
- If your Internet service provider supports V.90 or 56K, communications of up to 53 Kbps are available. This may vary, depending on the telephone line condition.
- If you use a splitter to branch the telephone line, the internal fax modem may not operate successfully.
- Select the appropriate mode adopted in your country. You can select it from the Modem Properties dialog box.

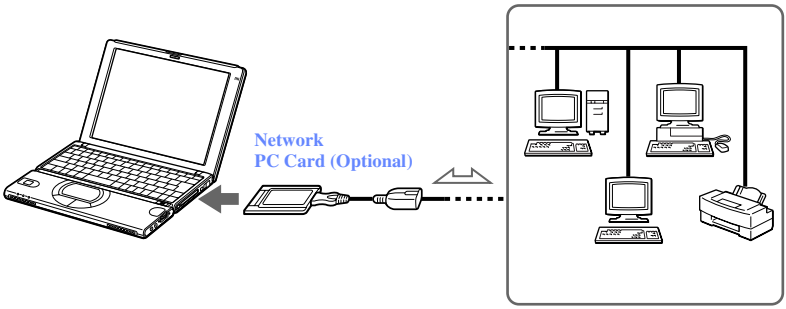
Using Local Area Network (LAN)

For the detailed settings and devices needed to connect to the network, please ask your system manager.

Using Ethernet to Connect to a Network

You can exchange data with other devices on a network by connecting your notebook to the location's Local Area Network (LAN). To connect the notebook to a network, you need a network PC card. For more information on using PC cards, see "Using PC Cards" on page 18 of the User Guide. Consult the network administrator to find out about the accessory settings required to access the network.

Connecting to LAN



Setting Up Your Ethernet Connection

To connect to the network (Windows Me):

1. Right-click My Network Places and select Properties.
2. Click the Identification tab and type in the notebook name, workgroup, and notebook description.
3. Enter the necessary setting provided by your network administrator.
4. Restart your notebook.

To connect to the network (Windows 2000):

1. Right-click My Network Places and select Properties. The Network and Dial-up Connections dialog box displays.
2. Click Make a New Connection. The Network Connection Wizard displays. Following the online instructions, enter the necessary setting provided by your network administrator to connect to the network.

To set network components (Windows Me):

1. Right-click My Network Places and select Properties.
2. Click the Configuration tab. This will give you access to a listing of installed network components. If you do not see the component you desire, click Add and follow the on-screen installation instructions.

To set network components (Windows 2000):

1. Right-click My Network Places and select Properties. The Network dialog box displays.
2. Click on Add. This will give you access to add or remove network components. Follow the on-screen installation instructions.

Connecting Peripheral Devices

This section describes how you can add functionality to your notebook by connecting it to a variety of peripherals, as discussed in the following sections:

- "Connecting a Floppy Disk Drive (Optional)"
- "Connecting an i.LINK® Device"
- "Connecting a Universal Serial Bus (USB) Device"
- "Connecting an External Display"
- "Recording from a Microphone or Audio Equipment"
- "Expanding Your Notebook Capabilities"

Connecting a Floppy Disk Drive (Optional)

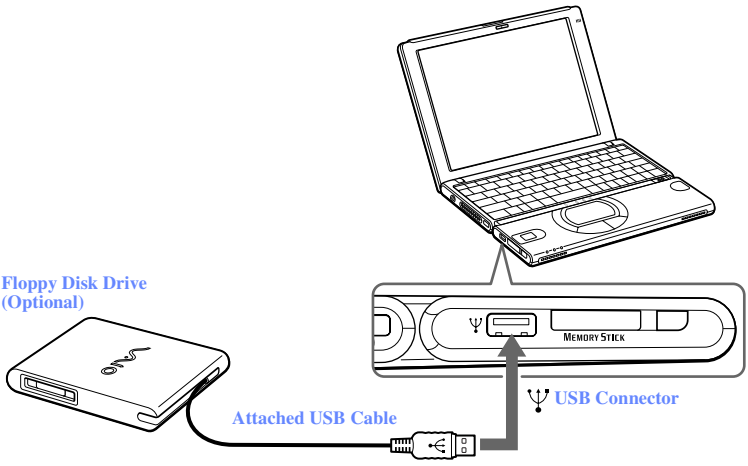
You can connect a Sony floppy disk drive (PCGA-UFD5) to the (USB) connector on your notebook as described below.

✍ You do not need to shut down your notebook to connect or disconnect a floppy disk drive. Before removing the floppy disk drive, see "To Disconnect a Floppy Disk Drive When the Notebook is On" .

To Connect a Floppy Disk Drive

Plug the USB cable from the optional floppy disk drive into the ⚲ (USB) connector on the notebook. The VAIO logo on the disk drive should be facing up.

Connecting a Floppy Disk Drive

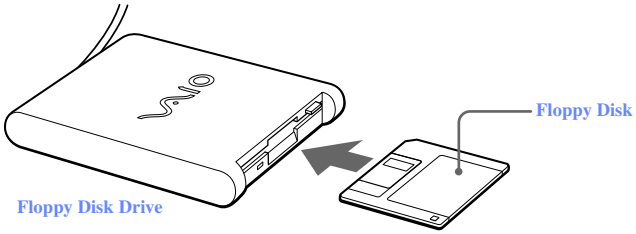


To Insert a Floppy Disk

1 Hold the floppy disk with the label side facing up.

2 Gently push the floppy disk into the drive until it clicks into place.

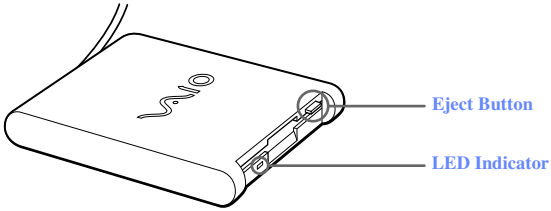
Inserting Floppy Disk



To Remove a Floppy Disk

When you finish using the floppy disk, wait until the LED indicator turns off and then press the Eject button to remove the floppy disk.

Removing Floppy Disk



Handling Floppy Disks

- Do not open the shutter manually and touch the surface of the floppy disk.
- Keep floppy disks away from magnets.
- Keep floppy disks away from direct sunlight and other heat sources.

To Disconnect a Floppy Disk Drive When the Notebook is On

1. Double-click in the task tray.
2. The “Unplug or Eject Hardware” dialog box appears.
3. Select the Y-E Data USB Floppy by clicking on it.
4. Click Stop.
5. Confirm the correct device is selected in the “Stop a hardware device" dialog box by clicking on Y-E Data USB Floppy.
6. The message “The Y-E DATA USB Floppy device can now be safely removed from the system” appears. Click OK.
7. Slide the release lever on the bottom of the notebook in the direction of the arrow, then unplug the floppy disk drive from the notebook.

To Carry a Floppy Disk Drive

Fold the floppy disk cable into the compartment on the side of the floppy disk drive.

Carrying a Floppy Disk Drive

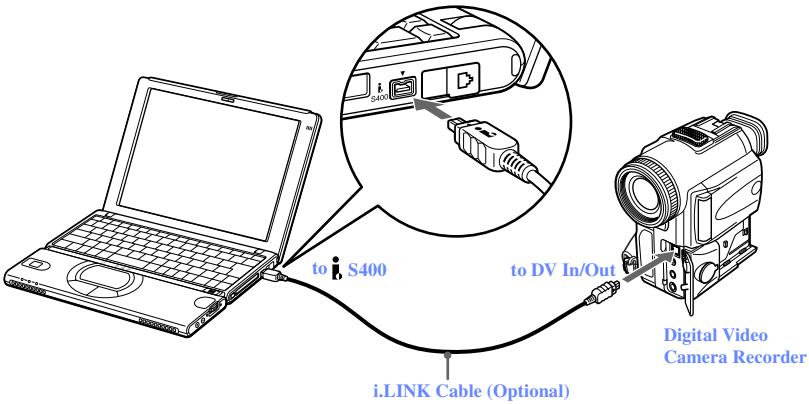
Connecting an i.LINK® Device

Your VAIO Notebook includes an i.LINK (IEEE 1394) S400 connector. The connector is a digital interface (IEEE1394) for high-speed communication. By using your notebook, a Sony Digital Handycam® Camcorder or other compatible camera that supports the i.LINK interface, the DVgate™ software that is preinstalled on your notebook, and the i.LINK interface, you can easily create and edit your own home videos.

To connect a Digital Video Camera Recorder

Plug one end of an i.LINK cable into the i S400 connector on the right side of the notebook and the other end into the DV In/Out connector on the digital video camera recorder. If your digital video camera recorder includes a Memory Stick® slot, you can copy images from it to your notebook via a Memory Stick media. Copy images to the Memory Stick media and insert the media into the Memory Stick slot on your notebook. See “Using Memory Stick® Media” for more details on Memory Stick.

Connecting a Digital Video Camera Recorder



* i.LINK is a trademark of Sony used only to designate that a product contains an IEEE 1394 connection. The i.LINK connection may vary, depending on the software applications, operating system, and i.LINK-compatible devices. All products with an i.LINK connection may not communicate with each other. Refer to the documentation that came with your i.LINK-compatible device for information on operating conditions and proper connection. Before connecting i.LINK-compatible PC peripherals to your system, such as a CD-RW or hard disk drive, confirm their operating system compatibility and required operating conditions.

✍ The above figure displays connection to a Sony digital video camera; your digital video camera recorder may need to be connected differently.

Only Sony digital video cameras, and connectors labeled “DV In/Out” or “i.LINK” are i.LINK-compatible.

See the manual that came with your digital video camera recorder for more information on installation and use.

The i.LINK connector does not supply power to external devices. If the external device requires power from the i.LINK connector, you cannot use the device with your notebook.

The VAIO® notebook supports transfer rates up to 400 Mbps; however, the actual transfer rate is the lowest transfer rate of the external device.

The i.LINK features available may vary depending on the software applications you use. See the documentation that came with your software for more information.

i.LINK cables compatible with your VAIO Notebook include the following cables:

Length	Connector	Part Number
1.5-meter	4-pin connector at each end	VMC-IL4415A
1.5-meter	4-pin connector at one end and 6 pin connector at the other end	VMC-IL4615A
0.8-meter	4-pin connector at each end	VMC-IL4408A

You can purchase these cables from your local retailer, through the Sony VAIO® Direct Web site (http://vaio.sonystyle.com/), or by calling 1-888-315-7669 (toll free).

DVgate™ Applications

Digital Video Captures

If your system displays the message “Failed to record to DV deck. Please check deck’s power status, cable connection and so on.” while you are recording images to a digital video device using DVgate, close all open applications, and restart your notebook. Frequent recording of images to a digital video device while using DVgate may cause this to occur occasionally.

For more information on DVgate, see the DVgate online help.

Adjusting Image Resolution

If the incorrect resolution is selected, the images on the LCD may not display smoothly. To check the resolution, click the Setup button in the DVgate Motion-Monitor window. Point to Settings, then select Low Resolution. The settings you change in this menu affect only the images in the monitor window. Movie data imported to the hard disk and images recorded to DV devices will not be affected.

Hard Drive Partition

To improve the performance of your notebook's DVgate™ Motion software, the hard disk drive on your notebook has been formatted with two partitions, C and D.* DVgate Motion saves files to the D partition. This prevents large video captures from consuming the available space on your C partition. To maintain optimum performance of DVgate Motion, you should defragment your D partition regularly. See the DVgate Motion online help for more information.

To Defragment a Partition

Before you begin to defragment a partition, make sure you backup all files that you want to save.

1. Click the Start button in the Windows® taskbar.
2. Click Programs>Accessories> System Tools> Disk Defragmenter. The Disk Defragmenter window appears.
3. Select the drive you want to defragment from the list, and click the Defragment button.

See Windows® Help for more information on defragmenting.

* See "Specifications" .

Connecting a Universal Serial Bus (USB) Device

You can connect USB devices, such as a USB mouse (optional), floppy disk drive, or printer* to your notebook.

You can use the optional Sony USB mouse (PCGA-UMS1 series) or the optional Sony floppy disk drive (PCGA-UFD5) with this notebook. Plug the USB device into the USB port. You do not need to turn off your notebook.

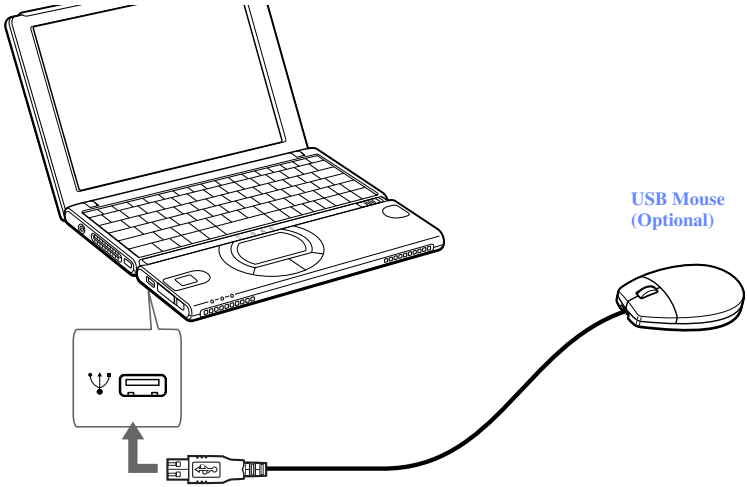
See the manual that came with your USB device for more information on installation and use.

To Connect a USB Device

1 Locate the ( ) USB connector on the left side of the notebook.

2 Plug on end of the USB cable in the notebook USB connector and the other end in the USB device.

Connecting a USB Device



* You must use a USB cable (optional) to connect a printer to your notebook.

Connecting an External Display

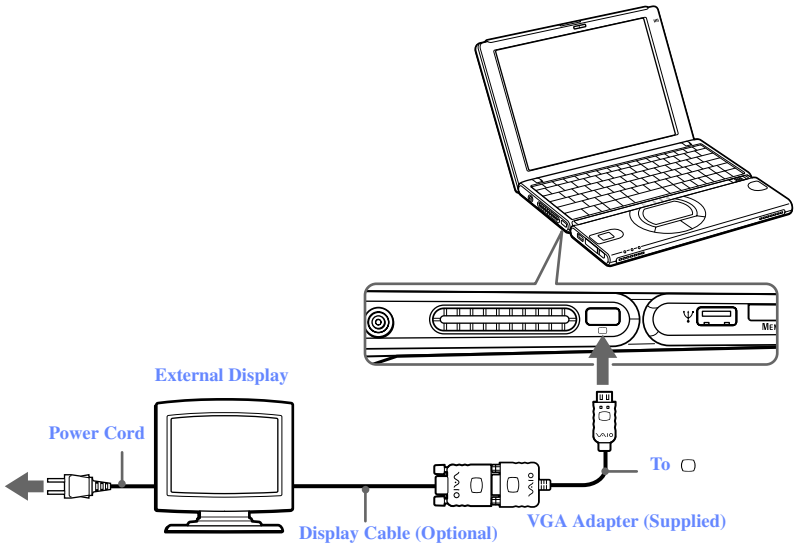
You can connect a computer monitor or projector to your notebook.

To Connect a Monitor

1. Locate the VGA connector on the left side of the notebook.
2. Plug appropriate end of the VGA adapter (supplied) into the notebook VGA adaptor connector, and plug the other end into the appropriate end of the display cable (optional).
3. Plug the other end of the optional display cable into the external display connector.

✍ Ensure that one end of the power cord of the display is plugged into the display, and the other end is plugged into an AC outlet.

Connecting a Monitor

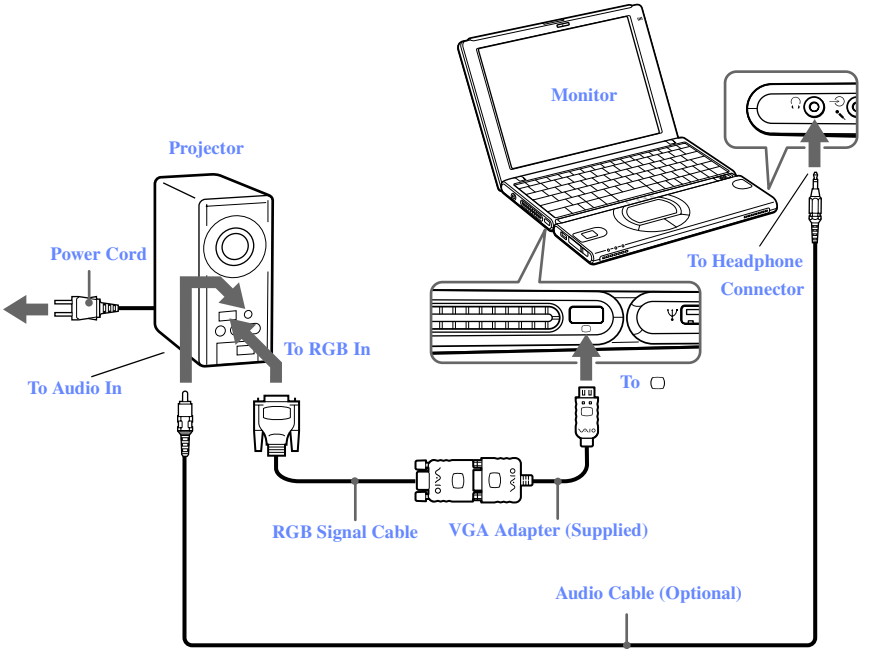


✍ See the manual that came with your monitor for more information on installation and use.

To Connect a Projector

You can use a projector, such as the Sony LCD Projector, as an external display.

Connecting a Projector



✍ See the manual that came with your projector for more information on installation and use.

To remove the display adapter

Press both sides of the display adapter connector and unplug it from the notebook.

To select a display

When you connect an external display to your notebook, you can press Fn+F7 to toggle the output between the Liquid Crystal Display (LCD), the external monitor, or both devices.

✍ See “Selecting the Display Mode” for more information.

Recording from a Microphone or Audio Equipment

You can record messages, memos, or other recordings in analog by connecting a microphone or other audio equipment to the Microphone/Line in connector of your notebook and then switching the connector functionality. The Microphone/Line in connector is for both MIC IN (monaural) and LINE IN (stereo).

Switching the connector functionality

To switch the Microphone/Line in m connector for use with a microphone or an audio device:

1. Double-click on the task tray located in the lower right corner of the Desktop window. The Volume Control window appears.
2. From the Options menu, click Properties. The Properties window appears.
3. In the Adjust Volume panel, select Recording, and then click OK. The Recording Control window appears.
4. Select either Microphone or Line.

✍ When you are recording using a microphone, select Microphone. If you are recording using other audio equipment, select Line.

Adjusting sound volume in the Recording Control window

When Microphone or Line are not displayed in the Recording Control window, from the Options menu, click Properties, click the item you want to display in Control, and then click OK.

✍ You can only adjust the recording volume in the Recording Control window in step 3. If you adjust the volume in step 1, the adjustment is only effective for playing sound. It does not adjust the volume for recording sound.

To increase the sound of the microphone:

1. Double-click on the task tray located in the lower right corner of the Desktop window. If Microphone is not displayed, from the Options menu click Properties, select Microphone from the Control panel, and then click OK.
2. From the Microphone panel, click Advanced. The Advanced Controls for Microphones dialog box displays.
3. Click Mic 20dB in Other Controls, and then click Close.

Adjusting volume

You can adjust the sound device volume for playing or recording.

To adjust the volume when playing, double-click in the task tray located in the bottom right corner of the Desktop window. The Volume Control window displays.

To adjust the sound of other devices, from the Option menu, click Properties. In the Volume Adjust window, select Playback, and click the check box of the item you want to display in Control. Click OK.

Sound device	Function
Volume Control	Adjust the sound level from the speakers or headphones.
WAVE	Adjust the wavfile sound or the effected sound of Windows.
PC Beep	Adjust the beep sound when inserting or removing the PC card, etc.
Telephone	Adjust the modem or telephone line volume.

Sound device	Function
Microphone1	Adjust the internal or external microphone volume.
Line	Adjust the audio equipment volume.
CD Audio	Adjust the volume of the CD in the CD-ROM drive (PCGA-CD51/A).
MIDI2	Adjust the MIDI sound.
3D Wide	Widen the sound effect. (Effective for games, etc.)

To make the microphone echo

1. From the Start menu, select Settings, and click Control Panel. In the Control panel, double-click YAMAHA DS-XG.
2. Select the Echo tab.
3. You can also customize the setting by choosing options such as Delay Time and Feedback.
4. Click OK.

✍ When recording or using microphone echo, some software options may not be available.

To add effect to MIDI sound

1. From the Start menu, select Settings, and then select Control Panel.
2. Click the YAMAHA DS-XG Audio Config icon. (If you do not see the icon that you are looking for, click “Display all the options of the Control Panel.”)
3. Select the Synthesizer tab.
4. Select the desired effect, and then click OK.

To adjust the sound volume when recording, double-click in the task tray located in the lower right corner of the Desktop window.

1. From the Options menu, select Properties.
2. In the Volume Adjust window, select Recording, and then click OK. The Recording Control window appears.

Expanding Your Notebook Capabilities

The following peripheral devices can be connected to your notebook, to expand the capabilities of your computer and enhance its versatility to meet your various business or personal needs:

- A Personal Digital Assistant (PDA)
- The Wireless LAN Access Point
- The Wireless LAN PC Card

Personal Digital Assistant

A handheld PDA is the quintessential personal planner and entertainment center that fits in your pocket. With a PDA, you can easily perform the following functions:

- Enter your schedule details in the calendar and view them by the day, week, or month, and even set an alarm to remind you of important events.
- Keep your contact names, addresses, phone numbers, and other details in the address book, and find them when you need them.
- Add tasks to the To Do List, prioritize them, and assign them due dates.
- Synchronize your data with the software on your notebook, to back up your data.
- Track expenses when you are out of the office, then transfer the data to your notebook.
- Exchange data with your notebook.

The Wireless LAN Access Point

The Wireless LAN Access Point, which is also called the Access Point, is designed for building a wireless LAN (Local Area Network) environment. The Access Point comes with the Wireless LAN PC Card and required software. You can easily build a wireless LAN environment by plugging the Access Point into an AC power outlet, installing the Wireless LAN PC Card in your notebook, and using the provided software. Because a wireless LAN configuration requires no wiring, you can operate multiple computers more freely than ever before.

You can also connect your Access Point to a telephone line, Integrated Services Digital Network (ISDN) router, cable modem, or Digital Subscriber Line (xDSL) modem to share access to the Internet among multiple computers.

The Wireless LAN PC Card

The Wireless LAN PC Card, which comes with the Wireless LAN Access Point, can be purchased separately and is designed for building a wireless LAN environment. The Wireless LAN PC Card can be used with or without the Access Point. With the Access Point, you can build a wireless LAN between computers that are equipped with the Wireless LAN PC Card and gain access to the Internet. Without the Access Point, you can achieve direct communication (Peer to Peer mode) between computers.

✍ For information on available Sony products, go to http://www.sonystyle.com.

Customizing Your VAIO® Notebook

You can customize the settings of your notebook. The following sections briefly describe how to change your notebook's default settings. You can also refer to Sony Notebook Setup Help for more detailed information.

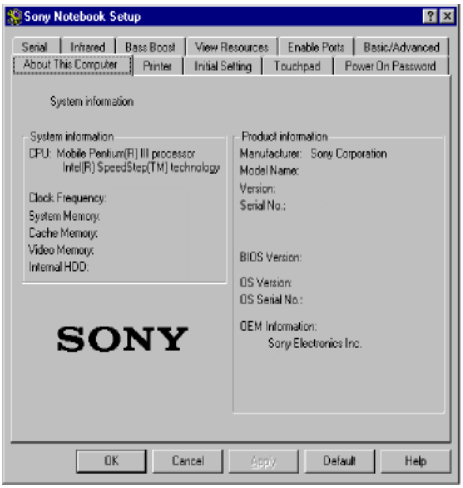
Displaying the Sony Notebook Setup Screen

To display the Sony Notebook Setup screen:

1 Click the Start button on the Windows® taskbar.

2 Point to VAIO and click Sony Notebook Setup.

Sony Notebook Setup Dialog Box



3 Select the tab for the item you want to change. See "Sony Notebook Setup Tabs" .

4 After you finish, click OK.

Sony Notebook Setup Tabs

Tab	Description
About This Computer	Display system information, including memory capacity, serial number, and BIOS version.
Printer	Select printer port mode settings.
Initial Setting	Change the volume of the sounds that play while the operating system is loading. Select the order of drives and devices from which you want to load the operating system.
Touchpad	When you connect an optional mouse to your notebook, you can make your touchpad inactive. You can also customize your mouse settings using the mouse utility.
Power On Password	Set the password to secure your notebook.
Enable Ports	Enable or disable ports. Disabling ports releases resources to the system. To change the serial or infrared settings, click Advanced on the Basic/Advanced tab.
Basic/Advanced	Switch between Advanced mode (additional screens with advanced settings) and Basic mode of display.

✍ For more information about each option, click Help on the Sony Notebook Setup screen to display the Help file.

Controlling Power Management

The Power Management utility allows you to control the power settings of your notebook and provides key information about system activity and battery life. The following sections briefly describe how to conserve your notebook's battery power. You can also refer to PowerPanel Help for more detailed information. To activate a profile or command, see "Displaying Battery Information" .

Viewing the Power Management Status Icons

The Power Management status icons are displayed in the task tray at the lower right side of your screen. Move the pointer over the icons to see the tool tip that displays information about the active profile. The Battery status icon indicates the battery power level and the CPU status icon indicates the performance level of the CPU.

To Activate the Power Management Toolbar

1. Right-click on the taskbar at the bottom of the screen.
2. Select Toolbars from the pop-up menu, and then click Power Management. The Power Management toolbar appears on the taskbar.

The current profile icon is highlighted on the Power Management toolbar. It is the first icon farthest to the left, and its appearance changes depending on which power management profile is currently selected. To change the power management profile, click the current profile icon, and then select a new profile from the pop-up list. See "Power Management Profiles" for a description of available options. To select another power management profile, click that icon in the Power Management toolbar.

✍ When you use the battery pack to power your notebook, your system selects the Maximum Battery Life power management profile by default. If you select a different power management profile while using battery power, the new profile is selected automatically the next time you use the battery pack to power your notebook.

Refer to PowerPanel Help for information on customizing the Power Management toolbar.

Customizing Power Management Settings

You can customize power management settings, such as the system timer and the brightness of the screen. To customize a setting:

1. Click the current profile icon on the Power Management toolbar.
2. Select Edit/Create Profiles from the menu.
3. Click a profile whose setting you want to change, from the list in the left panel.
4. Double-click an item whose setting you want to change from the list in the right panel.
5. Click the desired setting.
6. Click the File menu, and then click Save.
7. Click the File menu, and then click Exit.

Power Management Profiles

The PowerPanel utility provides several predefined power management profiles. Each profile consists of a group of power management settings that are designed to meet specific power management goals—ranging from maximum power management to no power management. You can change the settings for any of the predefined profiles (except for the Disable Power Management profile), or you can create your own profile to suit your portable computing needs. The predefined profiles are:

Icon	Description
	Maximum Performance Provides the best system performance while still conserving power.
	Maximum Battery Life Provides power saving features to give you maximum battery life and good performance. It slows the notebook and puts it into Standby mode after a specified time period.
	Disable Power Management Turns off all power management features such as Standby and Hibernate modes. You can not change the settings of this profile.
	AC Power The power management state when AC power is in use. Similar to the Power Management Off setting. Power Management automatically loads the AC profile unless you disable this feature.
	Games Disables the display and the Hard Disk Standby timer.
	Presentation Keeps the display on at all times while it conserves power. This option is ideal for slide show presentations. You can establish settings for LCD (Video) Standby, Hard Disk Standby, and Standby to optimize power management for your system.
	Camera Optimizes performance and power requirements for camera usage.

Icon	Description
	DVD Optimizes performance and power requirements for DVD usage.
	Word Processing Optimizes power management with longer timeouts on the hard disk and display screen. You can also establish settings for LCD (Video) Standby, Hard Disk Standby, and Standby to optimize power management for your system.
	Spreadsheet Optimizes performance and power requirements for spreadsheet applications.
	Communications Extends battery life by initiating a quick display timeout. The Internal modem remains powered. You can also establish settings for LCD (Video) Standby, Hard Disk Standby, and Standby to optimize power management for your system.
	Automatic Profile Selection Automatically switches to a profile suitable for active applications.

Power Management Commands

PowerPanel also provides power management commands that you can use to activate specific power management functions and to control power for a specific device. You can use these commands to override a profile setting or initiate an immediate action.

Icon	Description
	Standby Puts the system into Standby mode, a power management state that saves the state of the system and peripheral devices in memory (RAM). Power consumption reduces to a minimum, and the system remains on. To return the system to the active state, press any key or the power button on your notebook.
	Hibernate Provides for the lowest level of power consumption. The system writes the state of the system and peripheral devices to the hard disk and turns off the system power. To return the system to the original state, use the power button to turn on power. The system saves the data in the Save to Disk Partition on the hard drive.
	LCD (Video) Standby (Windows Me only) Turns off the video display to save power. If you turn off the Video Standby timer, the display remains active except when the system enters Standby mode. The video display system is one of the largest consumers of power in the system.

Conserving Battery Power

When using the notebook with a battery, the LCD display and the hard drive can be set to switch off automatically to conserve battery power.

See “Power Management Profiles” for details.

Displaying Battery Information

You can display detailed information for the battery in your notebook. The following sections briefly describe how to display your notebook’s general battery information. You can also refer to PowerPanel Help for more detailed information.

To Activate Battery Information Toolbar

1. Right-click anywhere on the taskbar at the bottom of the screen.
2. Select Toolbars from the pop-up menu, and then click Battery Information. The Battery Information toolbar appears on the taskbar.

You can also view the total capacity remaining in the battery by placing the pointer over the battery status icon in the task tray on the lower right side of the screen.

Battery Information Toolbar

- **Percentage indicator —** Displays the percentage of the remaining battery capacity.
- **Time indicator —** Displays estimated time (hours/minutes) remaining before the battery fully drains, also referred to as the time-to-empty.

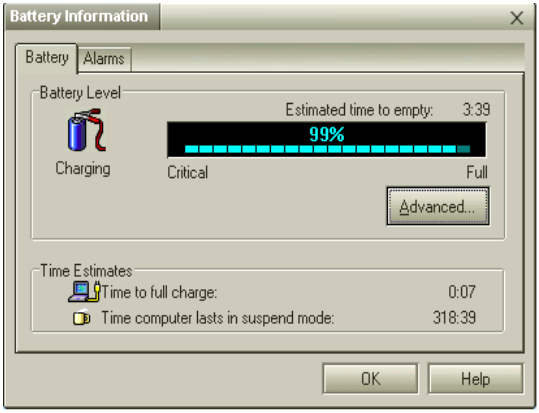
Battery Icon Descriptions

Battery Icon	Battery Status
	Charging
	Fully charged
	Discharging
	No battery

Displaying Detailed Battery Information

- Double-click the battery icon on the task tray to display the Battery Information window. The screen appears displaying the Battery tab, which contains information such as the estimated time-to-empty and charging time.

Battery Information Window



To customize the Battery Information toolbar and alarm system

You can customize the Battery Information toolbar to suit your portable computing needs, including modifications to the alarm settings. Refer to PowerPanel Help for more information.

Changing the Window Design of Sony Software

To change the window design of Sony software

1. Click the Start button, point to Settings, and then point to Control Panel.
2. Click UI Design Selector.
3. Click << or >> and select the desired design.
4. Click Apply. The "UI Design Selector" window design changes.

The window design for your Sony software will match the UI Design Selector window when you click OK.

To try another selection, click << or >> and then, click OK.

The UI Design Selector closes and the new window design of your Sony software displays.

✍ This feature is available with UI Design Selector-compatible software only.

Selecting the Display Mode

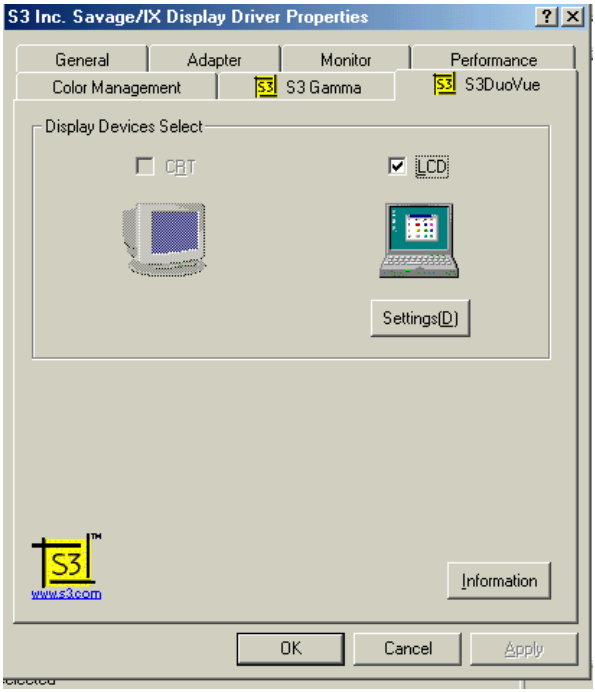
This notebook uses the S3 video controller. You can select which display is used when the notebook is connected to an external display. When you connect an external display, you can switch the display mode between your notebook's LCD display and the external monitor.

1. Click the Start button, point to Settings, and then point to Control Panel.
2. Click the Display icon. The Display Properties window appears.
3. Click the Settings tab, and then click the Advanced button.

   The S3 Inc. Savage/IX Display Driver Properties dialog box appears.

4 Click the S3DuoVue tab and select the desired display device.

S3DuoVue Screen



✍ You may not be able to display the notebook LCD screen and an external display or projector at the same time, depending on the types of computer displays and projectors you are using.

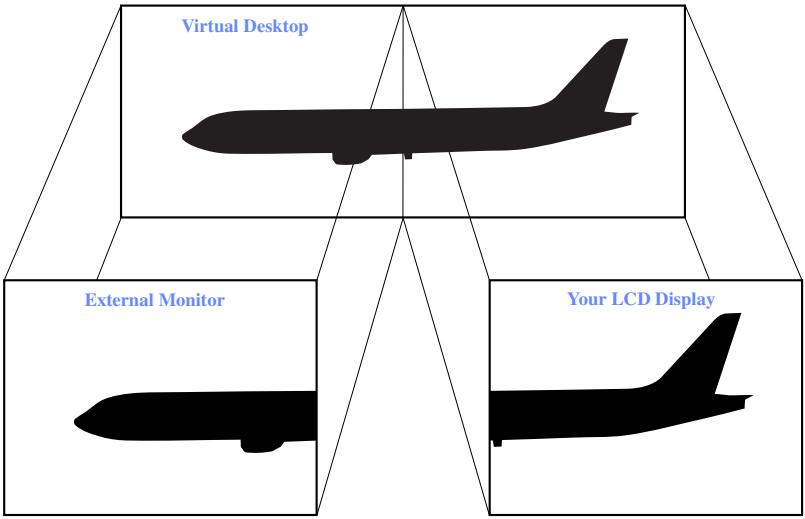
The CRT option is disabled if an external computer monitor is not connected to the external monitor connector.

Turn on the notebook after you turn on the peripheral devices.

Using the Dual Display Function (Windows Me only)

The dual display function allows you to distribute portions of your desktop across separate displays. For example, if you have an external display attached to the monitor connector, your notebook's LCD display and the external display can function as a single desktop. You can move the cursor from one display and onto the other. This allows you to drag objects, such as an open application window or a toolbar, from one display to the other. This configuration of a single desktop distributed across separate displays is referred to as a virtual desktop.

Virtual Desktop



Selecting Dual Display Mode

1. Click the Start button on the Windows taskbar.
2. Point to Settings > Control Panel.
3. Click the Display icon. The Display Properties window appears.
4. Click the Settings tab.
5. Click the Monitor shown as "2". The Monitor #2 dialog box appears.

6 Click Yes to enable the second display.

7 Click Apply.

Setting the Colors and Resolution for Each Display

You can set the display colors and resolution for each display that is part of a virtual desktop.

Follow steps 1 to 4 above to display the Display Properties screen. Select the display you wish to change (1 or 2) by clicking on the icon of the display. You can change colors by selecting an option from the Colors list. Use the slider in the Screen area to change the resolution. Click OK or Apply. Click OK to confirm your changes.

Customizing the Virtual Desktop

You can customize Dual Display mode by changing the position of the two displays that form the virtual desktop.

In the Display Properties screen, drag the icons of Monitor #1 or Monitor #2, to a new position that is relative to the other. The two display icons must be connected to create a virtual desktop. Click OK to apply the change.

✍ Monitor #1 is preset as your notebook's LCD display and Monitor #2 is preset for external display.

Releasing the Dual Display Setting

Follow steps 1-4 in the section "Selecting Dual Display Mode" . Right-click on Monitor #2, and then click on Enabled to release the setting.

✍ Some software is not compatible with Dual Display mode.

Adding Memory

Your notebook is equipped with two memory slots, and comes with one 64 MB memory module preinstalled in each of the two slots (64 MB x 2) for a total of 128 MB RAM. Maximum memory capacity is 256 MB. In the future you may want to install replacement memory modules, to expand the functionality of your notebook and increase its data processing speed, especially when several software applications are open at the same time. To upgrade memory, use only PC100(CL2) SDRAM SO-DIMM with gold lead contacts.

Related Safety Guidelines

Sony recommends that memory upgrades be performed by an authorized Sony Service Center. To find the nearest center or agent, see http://www.sony.com/pcsupport.

Be careful when installing a memory module in your notebook, and be sure to observe the proper safety precautions listed below. Mistakes that occur when installing or removing a memory module may cause a malfunction.

- The procedures described below assume familiarity with the general terminology associated with personal computers and with the safety practices and regulatory compliance required for using and modifying electronic equipment.
- Disconnect the system from its power source and from any telecommunications links, networks, or modems before you open the system or follow any of the procedures described below. Failure to do so may result in personal injury or equipment damage.
- Electrostatic discharge (ESD) can damage disk drives and other components. Perform the procedures described below only at an ESD workstation. If such a station is not available, do not work in a carpeted area, and do not handle materials that produce or hold static electricity (cellophane wrappers, for

example). Ground yourself by maintaining contact with an unpainted metal portion of the chassis while performing the procedure.

- Do not open the memory module package until you are ready to install the module. The package protects the module from ESD.
- Use the special protective package to store a memory module and prevent ESD, or wrap the memory module in aluminum foil.

Typical Expansion Memory Configuration

For Models with 64 MB Memory

Total System Memory (MB)	Slot 1 (MB)	Slot 2 (MB)
128	64	64
192	64	128
256	128	128
512	256	256

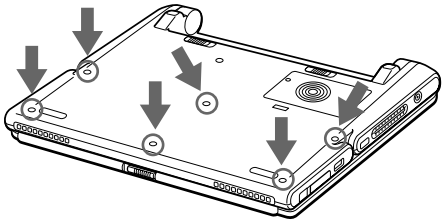
For Models with 128 MB Memory

Total System Memory (MB)	Slot 1 (MB)	Slot 2 (MB)
128	128	
192	128	64
256	128	128
512	256	256

To Install a Memory Module

1. Turn off the notebook and all peripheral devices.
2. Disconnect the power cord and all cables from the notebook, and then remove the batteries.
   The interior of the notebook becomes extremely hot during operation. Wait at least one hour for the notebook to cool down before you remove the screws.
3. Use a precision Phillips screwdriver that matches the size of the screw heads to remove the 6 screws marked (*) on the bottom of the notebook.

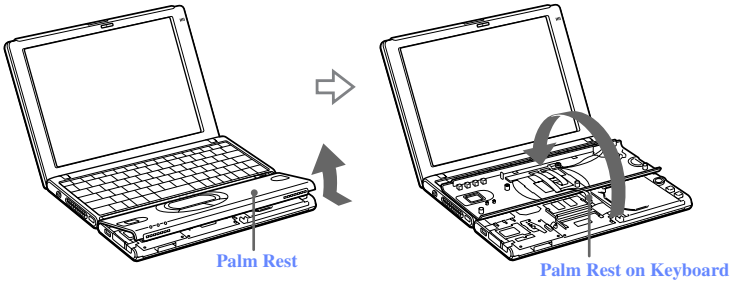
Location of Screws



To avoid damaging the notebook, do not remove or loosen any other screws.

4 Open the display panel, raise the palm rest toward you, turn it over, and then set it gently on the keyboard. When you turn the palm rest over, gently perform the action in order to avoid breaking the attached cable.

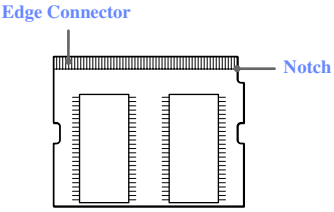
Opening the Display Panel



5 Before you remove the module from its package, touch a metal part of the notebook to discharge any static electricity accumulated on your body. Remove the module from its protective package.

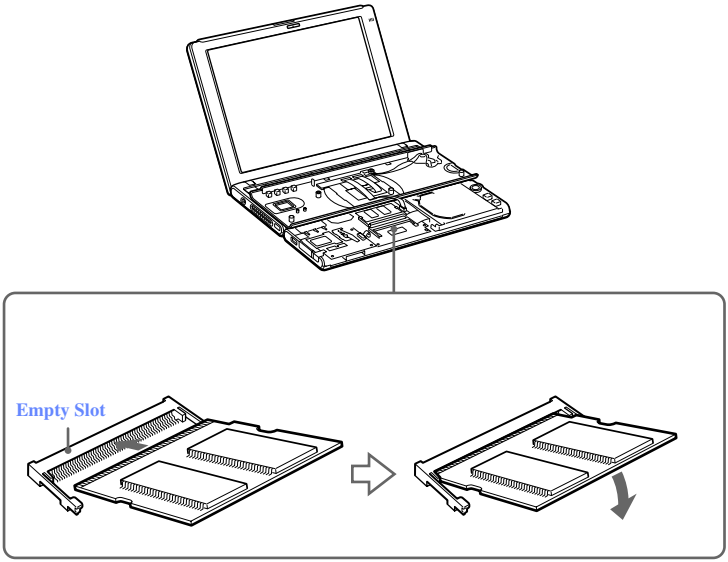
6 Install the memory module by holding the module edge connector pointing down with the notch on the right, and then insert it diagonally into an empty slot.

A Memory Module



Lower the memory module until it clicks into place on both ends.

Installing a Memory Module

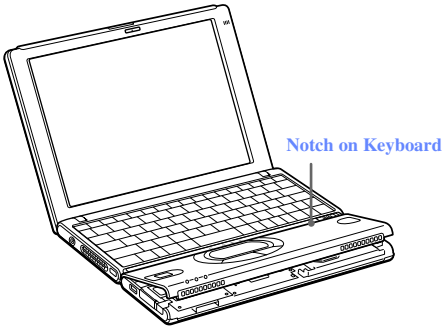


Do not touch any part of the motherboard or the other components inside the notebook.

7 Return the palm rest to its original position by aligning it with the notch on the keyboard and then setting it on the keyboard.

Handle the palm rest gently to avoid breaking the attached cable.

Aligning the Palm Rest



8 Close the display panel and replace the six (6) screws on the bottom of the notebook.

9 Use the Phillips (+) screwdriver to tighten all six screws at the locations shown below.

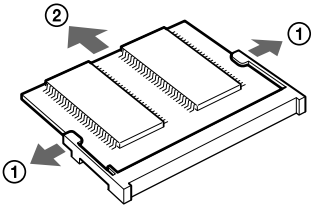
To Remove a Memory Module

1 Perform steps 1 through 3 of “To Install a Memory Module” .

2 Touch a metal object (such as the connector panel on the back of your notebook) to discharge static electricity.

3 Remove the memory module, pulling it out in the direction of the arrow.

Removing a Memory Module



Perform Steps 6 and 7 for “Installing a Memory Module” .

Confirming Added Memory Capacity

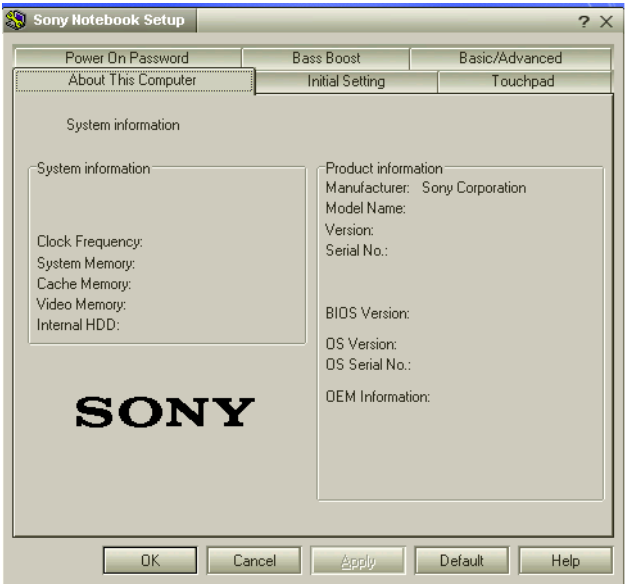
1 Turn on the notebook.

2 Click the Start button, point to VAIO, and then click Sony Notebook Setup.

3 Click the About This Notebook tab. Check the System Memory displayed in the left panel to confirm that the correct memory amount is displayed.

If the memory amount on the display is not correct, shut down the system, turn off the notebook, and repeat the installation procedures.

Sony Notebook Setup Dialog Box



About the Software on Your Notebook

Your VAIO notebook is ready to help you work, play, learn, and communicate as soon as you turn it on. This section provides you the following:

- An overview of the various software that come with your notebook and the activities you can perform with your software
- Details on your Sony application, driver, and system recovery CDs
- Software support information

Overview

Adobe Acrobat Reader®

Adobe Systems Inc.

Acrobat Reader software allows you to view, navigate, and print electronic documents in Adobe Portable Document Format (PDF), an open file format that is intended to preserve the fidelity of documents created on all major computer platforms.

America Online®

America Online

America Online is a popular Internet online service. Stay in touch with family and friends with easy-to-use e-mail, manage your personal finances, get the latest news and sports scores, and chat with thousands of others who share your interests.

Adobe® Photoshop® Elements (Windows Me only)

Adobe Systems, Inc.

Adobe Photoshop Elements offers unique features designed specifically for amateur photographers, hobbyists, and business users who want an easy-to-use, yet powerful digital imaging solution

✍ When you start Adobe Photoshop Elements for the first time, you will be prompted to enter a product code for the application to work correctly. This code is found in the printed Adobe information that is included with your notebook.

ArcSoft® PhotoPrinter™ 2000 Pro (Windows Me only)

ArcSoft, Inc.

ArcSoft PhotoPrinter 2000 Pro is an easy-to-use, advanced printing program that lets you quickly lay out multiple images in multiple sizes on a single sheet of paper. PhotoPrinter Pro offers a wide selection of templates including landscape, portrait, free style, mixed sizes, custom templates and more. The application includes enhancement tools and special effects for improving photos while giving you the ability to add text to any image.

CompuServe® 2000

CompuServe, Inc.

CompuServe is the most comprehensive source of organized business and educational information online today. CompuServe allows you to access the vastness of the Internet, without wasting time wading through it. Maximize your time online with CompuServe.

DVgate™

Sony Electronics Inc.

Connect a digital video camera recorder to the i.LINK® connector and capture your own video clips and still images. You can edit the clips from your video, add others, and combine clips into new movie segments. You can also save your images in a variety of popular file formats.

✍ If your VAIO® Notebook does not come with Adobe Premiere® pre-installed and you subsequently purchase that software, you must install a plug-in to enable DVgate™ 2.3.

To install the plug-in for Adobe Premiere® 5.1 and 5.1LE, proceed as follows:

1. Click Start in the Windows® taskbar and select Run.
2. Click Browse and, from your C: drive, select Program Files>Sony>Dvgate>Premiere Plug-in>5.1.
3. Select “Setup.exe” and click Open. Then click OK to install the plug-in.

To install the plug-in for Adobe Premiere® 6.0, proceed as follows:

1. Click Start in the Windows® taskbar and select Run.
2. Click Browse and, from your C: drive, select Program Files>Sony>Dvgate>Premiere Plug-in>6.0.
3. Select “Setup.exe” and click Open. Then click OK to install the plug-in.

Media Bar™ DVD Player

Sony Electronics Inc.

Media Bar DVD Player is your ideal, high quality solution for DVD video playback. You can rewind or fast-forward scenes from the DVD Player monitor as you would with any ordinary DVD player, to easily find the scene you want to view. Typical DVD playback features are available such as multiple angles, audio language tracks and sub-titles. This software is used in conjunction with the optional VAIO DVD Player and software installation CD, which are sold separately.

Microsoft® Internet Explorer

Microsoft Corporation

Internet Explorer delivers the web the way you want it. It is safe, easy to use, and you can personalize how you access the web. Outlook Express and other tools in Internet Explorer also help you have a great experience when you are on the web.

Microsoft® Word 2002

Microsoft Corporation

Microsoft Word 2002 makes it easy to create common Web, e-mail, and print documents for use around the world. It embraces HTML as a first-class file format and extends this software's ease-of-use to the Web and e-mail. Word 2002 also extends that ease-of-use to international users, making it simple to create multilingual documents.

MovieShaker™

Sony Electronics Inc.

Sony's original MovieShaker software creates personal movies that have transitions, background music and text. Just import your video clips and "shake" with the click of a mouse. Your personal movies are easy to create and fun to share with family and friends.

Netscape Communicator®

Netscape Corporation

Netscape Communicator is an all-in-one Internet tool that makes it easy to browse the web, send Internet e-mail, chat, read newsgroups and compose great web documents.

Norton AntiVirus™

Symantec Corporation

Norton Antivirus provides security for your Internet and email communications. This powerful antivirus software works in the background to continuously protect your PC, by scanning the files you download from the web and receive as e-mail attachments. Each time you connect to the Internet, Norton Antivirus updates its virus definitions to deliver automatic protection today and in the future.

OpenMG™ Jukebox

Sony Electronics Inc.

OpenMG Jukebox software enables you to import digital audio files by downloading audio files from Electronic Music Distribution (EMD) services over digital networks, such as the Internet. You can record audio CDs onto your hard drive in a variety of formats.

PictureGear™

Sony Electronics Inc.

This image management software displays images from your hard drive, a Sony Digital Still Camera, or a Sony Mavica® Camera. The images appear in a convenient light-table format, so that you can easily view the contents of an entire folder.

Quicken® 2001

Intuit, Inc.

Quicken is a fast, easy way to organize your finances. Quicken works just like your checkbook, so it is easy to learn and use. Quicken manages all your finances, bank accounts, credit cards, investments, and loans. You can even pay your bills online.

RealJukebox 2 Basic

RealNetworks, Inc.

RealJukebox is one of the worlds most widely used personal music management systems. Using RealJukebox, you can capture the contents of a music CD, manage and playback your music and view various music related information via the Internet. This Custom RealJukebox for Sony allows seamless check-out capabilities to a wide range of Sony personal audio devices and offers convenient links to Sony product and music service homepages.

✍ If you are using an external CD-ROM drive connected with a PC Card, be sure to connect your external CD-ROM drive before starting RealJukebox. Additionally, do not disconnect your CD-ROM drive while using RealJukebox. Either of these actions may cause RealJukebox to shut down improperly.

Smart Capture

Sony Electronics Inc.

Smart Capture is a fun new way to send multimedia messages via e-mail. Smart Capture manages the i.LINK connection between your computer and a Sony Digital Handycam® camcorder that supports the i.LINK interface. It allows you to capture compressed video or still images that you can save or share via e-mail. A smart solution to computer, digital audio/video and network convergence.

Smart Connect (Windows 2000 only)

Sony Electronics Inc.

Smart Connect allows you to use an i.LINK® cable (optional) to connect your VAIO computer to another VAIO computer that supports Smart Connect. You can then use one computer to copy, delete, and edit files on the other computer. You can also print from a printer attached to either computer.

VAIO Action Setup

Sony Electronics Inc.

VAIO Action Setup manages the settings for your notebook's Jog Dial functions and i.LINK interface.

VAIO Support Agent

Sony Electronics Inc.

VAIO Support Agent provides immediate, interactive, on-line support.

VisualFlow™

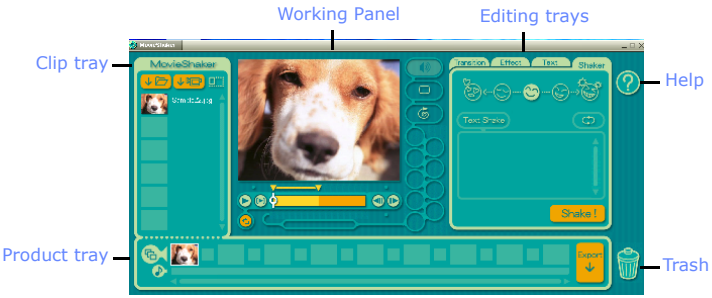
Sony Electronics, Inc.

VisualFlow is a state-of-the-art Sony multimedia browser designed specifically for Memory Stick media. It displays any still picture, movie or sound files stored in a Memory Stick media in a visually pleasing, artistic manner. VisualFlow not only plays a selected movie or sound file, but also enables playback of files by other applications like PictureGear, Memory Stick Slideshow and Windows Explorer.

MovieShaker™

This application can be used to create fun and innovative movies without any knowledge of film editing. In a few simple steps, motion pictures can be combined with special effects, still images (pictures), and music files and then saved in a format most computers can play.

Main Window



Importing Images and Sound Clips

1. Click (File Import) or (DV Import).
2. Find the file you want to add.
3. Select the file.
4. Click Open. The file is added to the Clip tray.

Importing files over 75 seconds in length may cause MovieShaker software to stop responding.

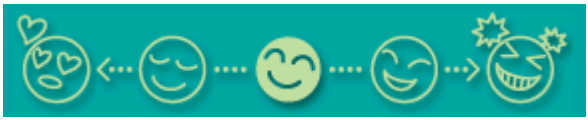
Creating a Movie using Shaker

After adding clip(s) to the Clip tray, you can create a short movie using the Shaker feature. Shaker randomly select clips from the Clip tray to create a 30-second scene.

1 Click the Shake tab.

2 Select a mood by clicking a face in the Shaker tray.

Shaker Tray



3 Click Shake !. A thirty second scene is automatically generated and saved to the Product tray.

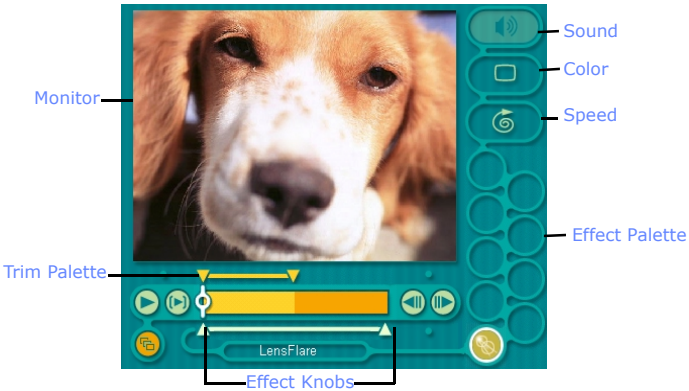
4 To preview, switch the scene from the Product Tray to the Work Panel and press play.

✍ Scenes created with Shaker begin with black frame and after processing are placed in the first available slot on the Product tray. Limit the number of scenes placed on the Product tray to 10 or less. MovieShaker software may stop responding if too many scenes are placed on the Product tray.

Editing Clips and Scenes

You can edit your movie by adding effects and text, adjusting the color and contrast, and modifying the length of clips.

Working Panel



Adding effects to a scene or a clip:

1. Double-click the clip or scene to move it to the Working Panel.
2. Select the Effects tab from the Editing tray.
3. Drag and drop the Effect you want to add from the Effects tray to the Effects palette on the Working Panel.

To preview an Effect, click on the clip in the Working panel monitor. Your clip displays with the new effect on the Effect tray monitor.

4. See help for instructions on adjusting effect duration and replaying clips/scenes.

Saving a Movie

1. Verify that the clip(s) you want to save is on the Product tray. See Help for more details on saving movies.
2. Click Export.
3. Select the format in which you want the clip to be saved.
4. Click Next.
5. Locate the folder to which you want the file saved.
6. Name the file.
7. Click Save.

Exporting movies may take a long time to complete—Save movie as DV (Digital Video) takes the longest and Quick-Save is the fastest. MovieShaker can play video files up to 65 MB in length.

For DV playback and smooth video playback, we recommend the following resolution/refresh rates: 1024 x 768/75 Hz or lower.

OpenMG Jukebox 2.0 Software Instructions

OpenMG Jukebox 2.0 is a software application that utilizes Sony Corporation's copyright protection technology. OpenMG Jukebox 2.0 maintains the holder's copyrights by preventing unauthorized distribution of digital audio files.

OpenMG Jukebox 2.0 software enables you to play and record audio CDs and import digital audio files. By downloading digital audio files from EMD services, the downloaded and imported data can then be played on your notebook or transferred to external devices/media while maintaining the copyright information of the contents. OpenMG Jukebox 2.0 converts your existing MP3 and WAV format audio files into OpenMG format (WAV format audio files are converted into ATRAC3 format or changed into OpenMG MP3 format).

Electronic Music Distribution (EMD) Services

EMD allows you to download music files via the Internet. To use OpenMG-enabled services on the Internet, you need:

- Access to the Internet from your notebook. Sign up with an Internet Service Provider and configure your notebook for Internet access before using EMD services.
- Free EMD programs such as EMD key installer. These programs can be downloaded from the Sony EMD Web page.
- An EMD service provider. Consult the provider for details regarding service.

✍ To protect your personal data, Sony uses SSL (an encryption protocol) for communication between your browser and the Sony WWW server. If you are accessing the Internet from inside of an enterprise LAN, you may not be able to use SSL due to the proxy server of the LAN. For help, contact your network administrator.

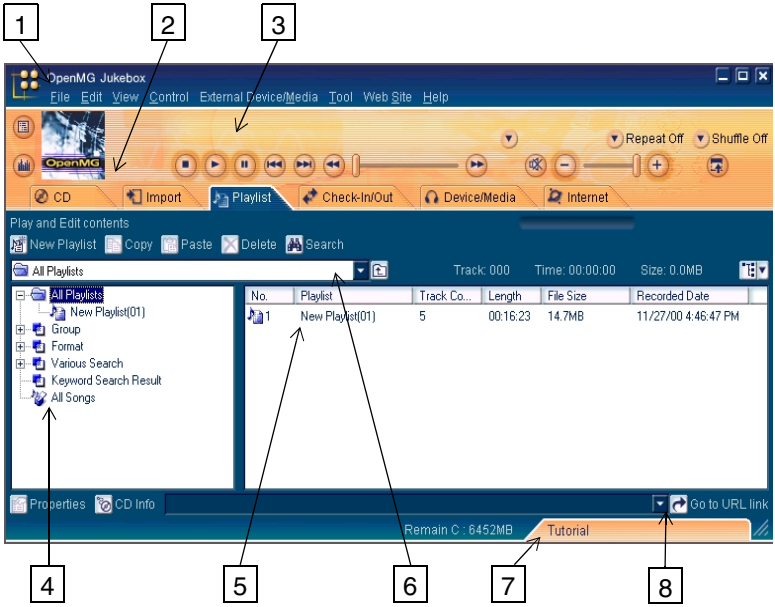
Starting OpenMG Jukebox 2.0

1 Click the Start button on the Windows taskbar, select Programs, OpenMG Jukebox, and then OpenMG Jukebox. The CDDB Registration dialog box appears. For more information regarding CDDB registration, click the Help button.

✍ To register with CDDB, you will need Internet access from your notebook.

2 After registering with CDDB, the “Set OpenMG Jukebox as the Application for playing Audio CD” dialog box appears. If you wish to set OpenMG Jukebox as the default application for playing audio CDs, select the appropriate checkbox. Click OK to close the dialog box. The OpenMG Jukebox window appears.

OpenMG Jukebox 2.0 Basic Features



1	Menu bar Displays OpenMG Jukebox menus.	5	File List view Lists the items under the selected folder in the File Tree view.
2	Screen Tabs Change the operational sheet view according to function.	6	Drop-down list Displays the playlists, audio files, etc., of the current screen tab.
3	Player control buttons Control playback (play, stop, pause, etc.).	7	Tutorial tab Opens and closes the Tutorial screen.
4	File Tree view Displays the folders on your notebook.	8	URL drop-down list Displays URL address information if available. Clicking the “Go to URL link” button connects to the Internet Web page of the URL.

Recording a CD

You can record songs from audio CDs and import them to playlists within OpenMG Jukebox.

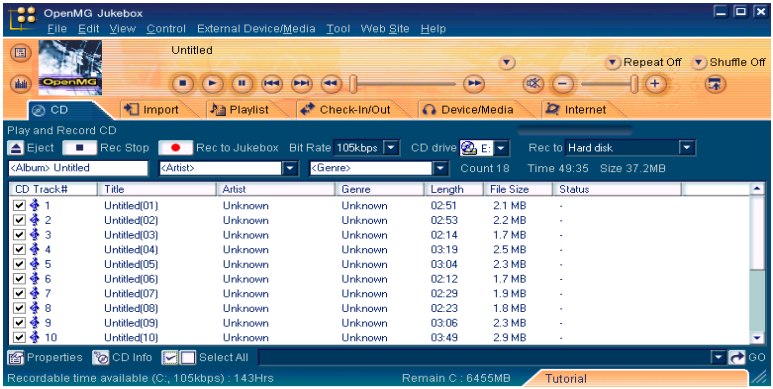
When you record from an audio CD on your CD-ROM drive for the first time, the "CD Drive Optimization" dialog box appears. Click Start to verify your optical drive. After the verification is performed, recording begins.

1 Insert an audio CD into the optical drive.

2 Click the CD tab.

3 Select the Bit Rate, CD drive, and Record to location from the drop-down lists.

CD tab screen



4 To select certain tracks from your CD, uncheck any unwanted tracks. You may also click the empty checkbox next to Select All (clears all checkboxes), and then select the desired tracks.

5 Click Rec to Jukebox. Recording begins. When the recording is finished, the new playlist appears in the File Tree view of the Playlist screen tab.

To name the album and songs, type the name, or retrieve it from the CDDB Web site on the Internet at http://www.cddb.com/cddb2info/using.html

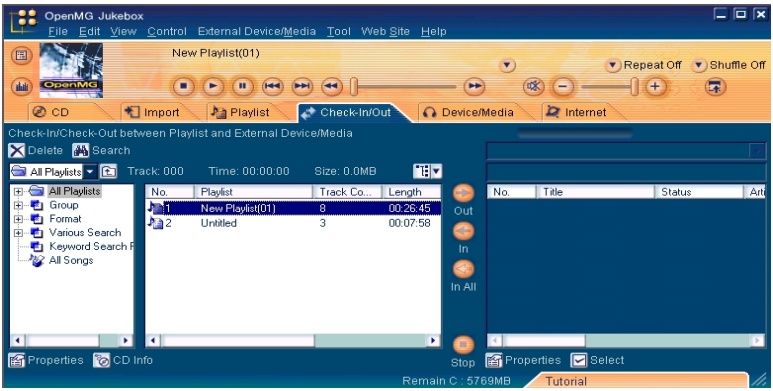
Transferring Songs (Check-in/Check-out)

You can transfer songs between the playlists of your OpenMG Jukebox and external devices/media. For details on using your external devices/media, see the user guide that came with your product. These instructions are for the Check-in/Check-out 1 step mode; for information on 2 step mode, see “Changing the check-in/check-out settings” in the OpenMG Jukebox Help menu.

Check-out

1. Connect the external device/media to your notebook.
2. Click the Check-in/Out tab to display the Check-in/Out screen. Your notebook recognizes the connected external device/media and lists the information on the right side of the screen.

Check-In/Out tab screen



3 Select the Playlist containing the song that you want to check out. The songs in the playlist are listed in the Playlist view in the center of the screen.

4 In the Playlist view, select the song to be checked out. To check out more than one song at a time, hold down the Ctrl key and click the songs to be selected.

5 Click (Out), or drag and drop the song to the desired position in the song list of the external device/media. Check-out begins.

✍ To cancel Check-out, click (Stop), or click Cancel in the Processing dialog box displayed during Check-out.

Check-in

✍ You can only check-in songs recorded on external devices/media to the hard drive of the same computer from which the songs were checked out.

1 Connect the external device/media to your notebook.

2 Click the Check-in/Out tab to display the Check-in/Out screen. Your notebook recognizes the connected external device/media and lists the information on the right side of the screen.

3 Select the song to be checked in from the song list of the external device/media. To check in more than one song at a time, hold down the Ctrl key and click the songs to be selected.

4 Click (In), or drag and drop the song(s) to the Playlist view. If you want to check in all of the songs in the external device/media, click (In All). Check-in begins.

✍ To cancel check-in, click (Stop), or click Cancel in the Processing dialog box displayed during Check-out.

For more information regarding the use of OpenMG Jukebox 2.0, read the OpenMG Help file. To access the OpenMG Help file, Click the Start button on the Windows taskbar, select Programs, OpenMG Jukebox, and then OpenMG Jukebox Help. Or, from the OpenMG Jukebox Help menu, select OpenMG Jukebox Help.

Additional Features

- **OpenMG Jukebox Tutorial —** In the Tutorial screen, the available operations of OpenMG Jukebox are briefly described. By clicking items in the screen, you are guided directly to the desired operations of OpenMG Jukebox.
- **OpenMG Jukebox Backup Tool —** Allows you to back up and restore all the data managed by OpenMG Jukebox, including music, graphics, and information. You must be connected to the Internet to use OpenMG Jukebox Backup Tool.
- **Import audio files in various formats —** You can import downloaded or stored audio files in various formats, such as MP3, WAV, or WMT (which is compliant with Windows Media Technologies with the extensions .asf or .wma), and manage them on the Playlist of OpenMG Jukebox.
- **Manage imported songs on the Playlist —** By registering imported songs to the Playlist of OpenMG Jukebox, additional features are made available other than playback. You can create a list of songs categorized by genre or artist, display the created list on a Playlist, and manage these songs in a hierarchical structure by using Playlist folders. You can also edit songs so that multiple songs are created as one (Combine), or divide one song into two (Divide).
- **Simple mode —** Allows you to perform playback operations only. The operation panel in simple mode is much smaller than in full mode. This is especially useful when you want to play songs with OpenMG Jukebox while using other software, or when you feel that the operation panel in full mode is too large. Additionally, the design of the operation panel in simple mode can be changed by adding a new Skin. Therefore, you can enjoy various panel designs.

Notes on Performing the System Restore Function of System Tools on Windows® Millennium Edition

If you perform the System Restore function of System Tools on Windows Me, the OpenMG Jukebox version 2.0 database may become corrupted and all music files recorded or imported may not play. Follow the steps below to back up and restore all music files managed by OpenMG Jukebox.

1. Before performing the System Restore function, back up your music files by using OpenMG Jukebox Backup Tool. This will help prevent unwanted loss of music files.
2. After performing the System Restore function, restore your music files by using OpenMG Backup Tool. This will help to ensure the reliability of playback.

For details on using OpenMG Jukebox Backup Tool, refer to the online help for OpenMG Jukebox.

Notes on Using Portable Players

If you have purchased a Portable Player such as NW-MS7 or NW-E3, do not install the version of OpenMG Jukebox that came with the Portable Player. Your notebook already has OpenMG Jukebox version 2.0 preinstalled. Overwriting OpenMG Jukebox version 2.0 for VAIO computers may generate malfunctions.

To connect you Portable Player to your VAIO computer, you need a plug-in for OpenMG Jukebox version 2.0. For details, refer to Sony Walkman® Product Support on the Web at http://www.sony.com/walkmanproductsupport.

PictureGear™

PictureGear software is a digital image management application that allows you to see all the images stored in any directory on your notebook. Thumbnail views provide quick reminders of your pictures. Brighten, contrast, enhance, resize, crop, and color-correct your pictures. Create panoramic views, animations, screen savers, wallpaper, still pictures from MPEG, and even html photo albums.

Managing Your Pictures

Use the collection feature to manage your pictures.

1. From Collection menu, select Create New Collection.
2. Enter a name for the collection and then click Okay.
3. Click the Folder tab and browse to locate your pictures.
4. Select the pictures you want to have in a collection.
5. Select Add File to collection.
6. Select Collection Folder.
7. Click Okay.

Creating a Photo Album

1. Select the pictures you want to use to make an album.
2. From the Utilities menu, select Album Maker.
3. Choose the type of Album you want and click Okay.
4. Now add more pictures, frames, text, and effects.
5. When you are finished, select Create Album in File menu or click the Create Album icon on the toolbar.
6. Designate the folder you where want to save the Album.
7. Enter the Target Album name, select Thumbnails and click Okay.
8. The new album can be viewed using most internet browsers.

Using Panorama Maker

Panorama Maker stitches a group of still images into a 360 degree panoramic picture. The source images should be the same size and overlap 20%.

How to stitch a panoramic picture:

1. Gather the source images into the same folder or collection.
2. Select the images you want to use.

✍ We recommend 12 landscaped or 16 portrait pictures.

3. From the Utilities menu select Panorama Maker.
4. Select the correct lens and click Okay. (If 35mm lens is selected the prompt, does not appear; to select a different lens, click the lens icon.)
5. Click the panoramic icon, near the bottom of the window.
6. Click Full Stitch.

Making Still Images and Panoramic from MPEG

1. Select the MPEG file.
2. From the Movie/Sound menu, select Scene break down.
3. Then select Movie Stitch, to create a panoramic picture.

Application, Driver, and System Recovery CDs

Your notebook comes with the following application, driver, and system recovery CDs. (To use your recovery CDs, see “Using the Application Recovery CD(s)” .)

Application Recovery CD(s)

Sony Electronics, Inc.

This CD enables you to reinstall individual applications. Use it to restore corrupted or accidentally erased files.

Driver Recovery CD(s)

Sony Electronics, Inc.

This CD enables you to reinstall individual device drivers. Use it to restore corrupted or accidentally erased files.

System Recovery CD(s)

Sony Electronics, Inc.

This CD enables you to format the hard disk drive, then reinstall the operating system and software titles that shipped with your notebook if they become corrupted or are erased. Use it to restore the hard disk of the VAIO ® Notebook you purchased. This CD restores your notebook to its original state, so user data and applications will be lost.

Using Your Recovery CDs

Using the Application Recovery CD(s)

The Application Recovery CD(s) allows you to reinstall individual applications if they become corrupted or are accidentally erased. Reinstalling an individual software title may correct a problem you are experiencing with your notebook or software application; you may not need to reinstall the entire contents of your hard drive. If you need to reinstall all the software titles that shipped with your notebook, use the System Recovery CD(s). See “Using the System Recovery CD(s)” for more information.

You can also use the Application Recovery CD to install Windows 2000 drivers on your notebook.

✍You must be in Windows to run the Application Recovery CD. If you have any questions on using the Application Recovery CD, contact Sony Customer Support.

To use the Application Recovery CD(s)

1. Turn on your notebook. If your notebook is already on, close all applications.
2. When the Windows desktop appears, insert the Sony Application Recovery CD in the optical drive. The Application Recovery utility loads automatically.
3. When the Application Recovery menu appears, select the icon for the application you want to restore then follow the on-screen instructions to complete the recovery process.

✍Your system may include one or two Application Recovery CDs. If you have two Application Recovery CDs, insert the first CD to run the Application Recovery program. You may be prompted to insert the second CD, depending on the application you wish to restore.

Using the Driver Recovery CD(s)

The Driver Recovery CD utility enables you to reinstall individual drivers if they become corrupted or are accidentally erased. You can reinstall an individual driver to correct a problem that you are experiencing with your notebook, hardware, or software application. VAIO Support Agent uses a vault feature on the Driver Recovery CD(s) to repair software applications.

✍You must be in Windows to run the Driver Recovery CD utility.

To Use the Driver Recovery CD(s)

1. Turn on your notebook. If your notebook is already on, close all applications.
2. When the Windows desktop appears, insert the Driver Recovery CD in the optical drive. Use My Computer or Windows Explorer to view the contents of the Driver Recovery CD. Select the appropriate driver.

To repair software applications using VAIO Support Agent

The Driver Recovery CD utility has an information vault that contains the original characteristics for the preinstalled software applications that are protected by VAIO Support Agent.

Using the System Recovery CD(s)

You can use the System Recovery CD(s) to reinstall the operating system and software titles that shipped with your notebook if they become corrupted or erased. You may not need to reinstall the entire contents of your hard drive. If you experience a problem with your notebook, reinstalling an individual device driver or software title may correct the problem. Use the Application Recovery CD(s) to reinstall individual applications or use the Driver Recovery CD to reinstall device drivers. See "Using the Application Recovery CD(s)" for more information.

The System Recovery CD contains a backup copy of all the software originally installed on your hard disk drive. **It can be used only to recover the hard disk of the notebook you purchased.**

The System Recovery utility gives you Full Restore with Format, that is it formats the hard disk drive then restores all the original software.

Full Restore with Format removes all the information on the hard disk drive. You will lose any software you have installed and any other files you have created since you started to use your notebook. This means you will have to reinstall any applications that were not included with the notebook when you purchased it. If you have any questions on using the System Recovery CD, contact Sony Customer Support.

To use the System Recovery CD(s)

1. Insert the Sony System Recovery CD in the optical drive.
2. Shut down your notebook as described in "Shutting Down Your Notebook" .
3. Wait four seconds then turn on your notebook.
4. Click OK to signify you have read and accept the Microsoft End-User License Agreement.
5. When the System Recovery menu appears, follow the on-screen instructions to complete the recovery process.

If your notebook does not start from the Recovery CD

1. Press the power button and hold it for more than four seconds to turn off the notebook.
2. Turn on the notebook. When the Sony logo is displayed, press the F2 key. The BIOS setup menu screen appears.
3. Press the arrow keys to select the Exit menu.
4. Press the arrow keys to select “Get Default Values” then press the Enter key. The message “Load default configuration now?” appears.
5. Check that “Yes” is selected, then press the Enter key.
6. Press the arrow keys to select “Exit” (Save Changes) and then press the Enter key. The message “Save configuration changes and exit now?” appears.
7. Check that “Yes” is selected, then press the Enter key. The notebook restarts from the Recovery CD.

✍Your system may include one or two System Recovery CDs. If you have two System Recovery CDs, insert the first CD to run the System Recovery program. You are prompted to insert the second CD once the information from the first CD has been installed.

The recovery process takes from 30 to 60 minutes to complete.

After recovering your system using the SRCD, you may be prompted to insert your ARCD after restarting Windows. Insert the ARCD to automatically complete recovery of your system.

Recovering Microsoft® Word 2002

If you recover your operating system using the System Recovery CD, Microsoft Word 2002 will not be recovered. Use the supplied Word 2002 CD-ROM to recover this application.

Software Support Information

Acrobat® Reader, Adobe Photoshop Elements, (Adobe Systems Inc.)

Web site	http://www.adobe.com/
phone	206-628-2746 (fee-based support)
fax	206-628-5737
e-mail	techdocs@adobe.com
hours	M-F, 6 AM-5 PM PT

America Online® (America Online)

Web site	http://www.aol.com
phone	800-827-3338
hours	7 days a week, 24 hours a day

CompuServe® 2000 (CompuServe, Inc.)

Web site	http://www.compuserve.com
phone	800-848-8990

Netscape Communicator® (Netscape Communications Corp.)

Web site	http://www.netscape.com/
phone	888-4SONYPC (888-476-6972)*
hours	7 days a week, 24 hours a day

* Support from 1-888-4SONYPC is free of charge for 90 days after the original date of purchase.

Norton AntiVirus (Symantec Corporation)

Web site	http://www.symantec.com/techsupp/
phone	800-927-3991 / 900-646-0007*
hours	7 days a week, 24 hours a day

* Support from 1-800-927-3991 is fee-based per incident. Support from 1-900-646-0007 is fee-based per minute. The on-line support is free of charge.

PhotoPrinter™ 2000 Pro (ArcSoft, Inc.)

Web site(s)	http://www.arcsoft.com http://www.photoisland.com
phone	510-440-9901
fax	510-440-1270
e-mail	techsupport@arcsoft.com
hours	M-F, 8:30 AM-5:30 PM PT

Quicken® 2001 Basic(Intuit Inc.)

Web site	http://www.intuit.com/support
phone	1-900-555-4932 (Live Phone Support and is $1.95 per minute.) 1-800-644-3193 (Automated telephone support.)
hours	Live phone support hours: M - F, 5 AM - 5 PM PT

Real Jukebox (Real Networks)

Web site	http://service.real.com/rjoptions.html (For answers to software and 'how to use' RealJukebox questions) http://service.real.com/help/call.html (For technical support via e-mail)

Windows® 2000 Operating System, Windows® Millennium Edition Operating System, Internet Explorer, Word 2002 (Microsoft Corporation)

Web site	http://www.sony.com/pcsupport
phone	888-4SONYPC (888-476-6972)*
hours	7 days a week, 24 hours a day

* Support from 1-888-4SONYPC is free of charge for 90 days after the original date of purchase.

Sony Service Center

For the Sony Service Center nearest you, call 1-888-4SONYPC (1-888-476-6972) or find Sony Customer Service on the Web at http://www.sony.com/pcsupport/.

Getting Help

Sony provides several support options for your VAIO Notebook. If you have questions about your notebook or the preinstalled software, refer to the following sources for answers, in the order listed:

1	**VAIO® Notebook User Guide** This is the online User Guide you are currently utilizing; it contains information on product specifications and on how to get the most from your notebook, find help, customize your notebook, and solve common problems.
2	**Manuals and online help files that may accompany your preinstalled software** Most of the manuals for preinstalled software are located on your hard disk drive as online help files. You can access the online help files from the Help menu in the specific application. A printed manual is available for some applications.
3	**VAIO Support Agent** VAIO Support Agent can be accessed from the Windows desktop. Using advanced diagnostic technology, Sony's VAIO Support Agent runs scheduled protections of your applications, network settings, and other important software settings. When your software is protected, you can use VAIO Support Agent to repair software problems by restoring your software to any of the previously protected states.
4	**Sony PC Support** Provides instant access to information on commonly encountered problems. Enter a description of your problem and the Knowledge Database searches for the corresponding solutions online. You can access the Sony PC Support at: http://www.sony.com/pcsupport/
5	**Sony Fax-on-Demand** This service, which requires a fax machine or your fax software, provides answers to commonly asked questions. You can use this automated service to request a list of available topics then select the topics that you want to receive. To contact the Sony fax-on-demand service, call: 1-888-4SONYPC (1-888-476-6972)
6	**Calling Sony Customer Support** Sony provides software support free of charge for 90 days after the original date of purchase. You can speak with a Sony Customer Support Representative without using your notebook by calling: 1-888-4SONYPC (1-888-476-6972)

VAIO Support Agent

VAIO Support Agent helps you repair your own software problems without the assistance of a support analyst. VAIO Support Agent's advanced diagnostic technology identifies and tracks characteristics of your software applications and basic network settings. These diagnostics protect and store information in a retrievable format that enables you to restore your software to a previous working state. Sony has identified the software items that are protected by the VAIO Support Agent utility.

VAIO Support Agent has three features to help you fix your software problems: Quick Fix Wizard, Common Solutions, and Support Central. This section briefly describes these three features, and the automatic update capability of the VAIO Support Agent.

VAIO Support Agent main window

Using the Quick Fix Wizard

The VAIO Support Agent records and maintains a history of the VAIO Support Agent protected applications by taking a “snapshot” of the application at regular, timed intervals and storing it for future use. Should a problem develop with one of the protected applications, you can use the Quick Fix Wizard feature to retrieve the date/time (snapshot) that was recorded when the application worked correctly. The Quick Fix Wizard repairs the protected application files without altering the data files you have created using the application.

To use the Quick Fix Wizard, follow these steps:

1 From the VAIO Support Agent main window, click the Quick Fix Wizard button. The Welcome window appears.

2 Click Next. The "Quick Fix Wizard: Begin VAIO Support Agent Diagnostics" dialog box appears.

3 Select the "Diagnose and fix my software" option.

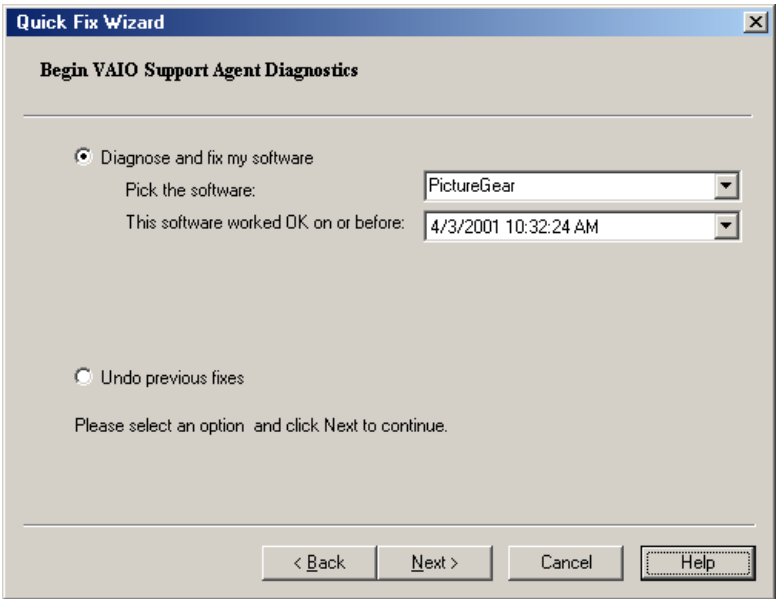
4 Select the software you wish to repair from the drop-down list.

To view a list of software applications protected by VAIO Support Agent, click on the "Pick the software:" drop-down list.

5 Next, select a date/time from the drop-down list that corresponds to the last time when the software worked properly.

6 Click Next to continue. Follow the instructions on the screen.

Quick Fix Wizard: Begin VAIO Support Agent Diagnostics dialog box

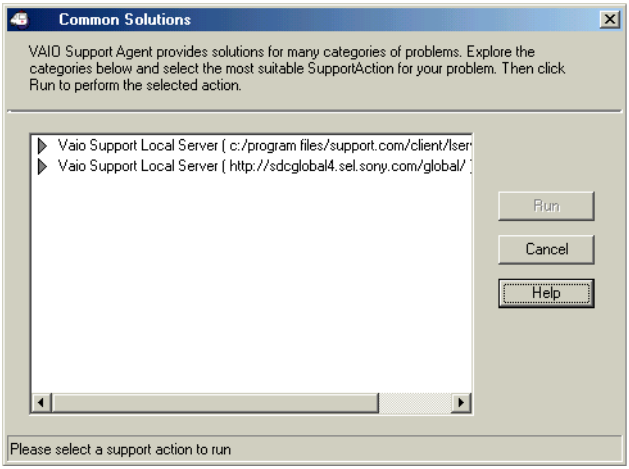


Using Common Solutions

Common Solutions offers automated, One-Click Fixes to repair common software problems. These solutions can integrate information such as knowledge base articles and Frequently Asked Questions (FAQs). You can run One-Click Fixes directly from VAIO Support Agent or from a Web browser.

1. Click the Common Solutions button. The Common Solutions dialog box appears.
2. Double-click on the desired category to expand and view available SupportActions.
   - VAIO Support Local Server (c:/program files/support.com...) provides a list of SupportActions available on your notebook's hard disk drive.
   - VAIO Support Local Server (http://sdcglobal4.sel.sony.com...) provides a list of SupportActions available from the Internet.

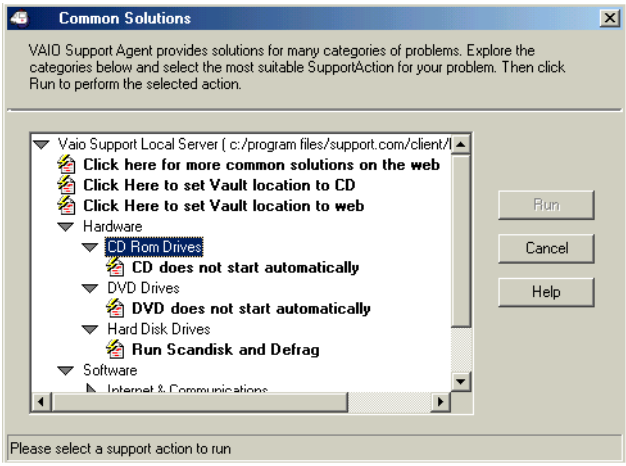
Common Solutions dialog box (1st level)


Common Solutions
VAIO Support Agent provides solutions for many categories of problems. Explore the categories below and select the most suitable SupportAction for your problem. Then click Run to perform the selected action.
Vaio Support Local Server (c:/program files/support.com/client/lser
Vaio Support Local Server (http://sdcglobal4.sel.sony.com/global/
Run
Cancel
Help
Please select a support action to run

✍ Connect to the Internet before attempting to view the category, "Vaio Support Local Server (http://sdcglobal4.sel.sony.com...)." This category is unavailable without an Internet connection.

3 Click the resize arrows next to the SupportAction categories to expand or collapse the categories.

Common Solutions dialog box (2nd level)


Common Solutions
VAIO Support Agent provides solutions for many categories of problems. Explore the categories below and select the most suitable SupportAction for your problem. Then click Run to perform the selected action.
Vaio Support Local Server (c:/program files/support.com/client/
Click here for more common solutions on the web
Click Here to set Vault location to CD
Click Here to set Vault location to web
Hardware
CD Rom Drives
CD does not start automatically
DVD Drives
DVD does not start automatically
Hard Disk Drives
Run Scandisk and Defrag
Software
Run
Cancel
Help
Please select a support action to run

4 Select the appropriate SupportAction from the list.

5 Click Run or double-click the desired SupportAction. The available SupportActions are shown in bold type.

✍ You cannot undo One-Click Fixes.

Using Support Central

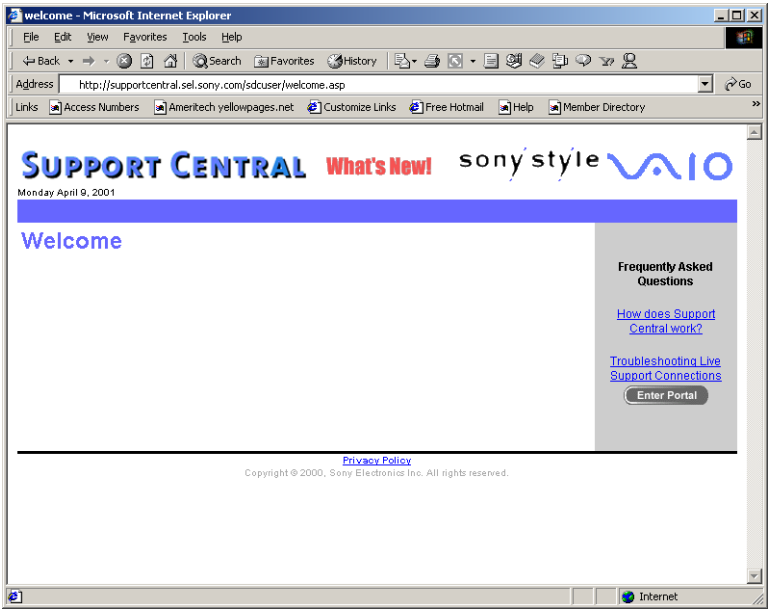
The Support Central feature uses Internet resources to help you fix your software. Support Central searches the Internet for answers to your questions, additional information from knowledge base systems, and the latest software updates for your protected software. Support Central also lets you contact live support agents for additional help.

1 Connect to the Internet.

2 From the VAIO Support Agent main window, click Support Central. The Support Central Welcome page appears.

✍ You must have Internet access to use Support Central.

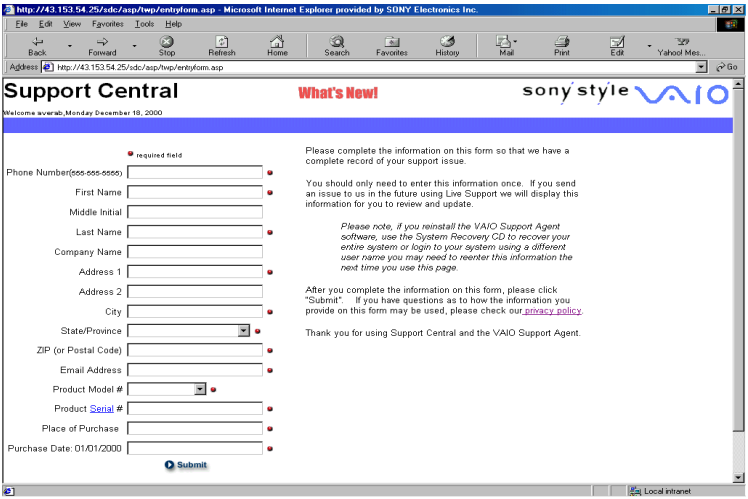
Support Central: Welcome page



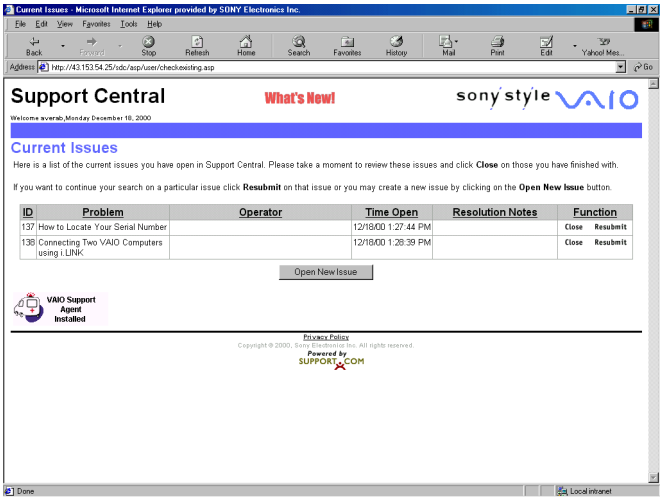
3 Click Enter Portal to begin using Support Central. First-time users will be asked to register with Support Central.

Support Central retains your registration information, so you are only required to register once. If you log on to your notebook with a different user name or have recovered your system using the System Recovery CDs, Support Central may require you to register again.

Support Central: Registration page

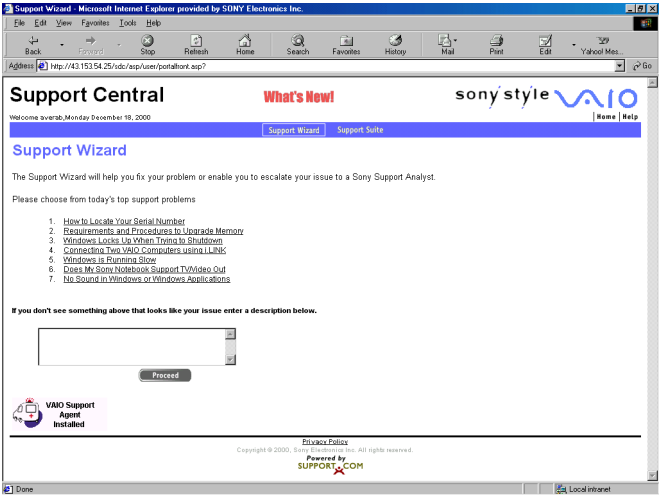

http://43.153.54.25/sdc/asp/twp/entryform.asp - Microsoft Internet Explorer provided by SONY Electronics Inc.
File Edit View Favorites Tools Help
Back Forward Stop Refresh Home Search Favorites History Mail Print Edit Yahoo! Mes...
Address http://43.153.54.25/sdc/asp/twp/entryform.asp
Go
Support Central
What's New!
sony style VAIO
Welcome averab,Monday December 18, 2000
required field
Phone Number(555-555-5555)
First Name
Middle Initial
Last Name
Company Name
Address 1
Address 2
City
State/Province
ZIP (or Postal Code)
Email Address
Product Model #
Product Serial #
Place of Purchase
Purchase Date: 01/01/2000
Submit
Please complete the information on this form so that we have a complete record of your support issue.
You should only need to enter this information once. If you send an issue to us in the future using Live Support we will display this information for you to review and update.
Please note, if you reinstall the VAIO Support Agent software, use the System Recovery CD to recover your entire system or login to your system using a different user name you may need to reenter this information the next time you use this page.
After you complete the information on this form, please click "Submit". If you have questions as to how the information you provide on this form may be used, please check our privacy policy.
Thank you for using Support Central and the VAIO Support Agent.
Local intranet

Support Central: Current Issues page


Current Issues - Microsoft Internet Explorer provided by SONY Electronics Inc.
File Edit View Favorites Tools Help
Back Forward Stop Refresh Home Search Favorites History Mail Print Edit Yahoo! Mes...
Address http://43.153.54.25/sdc/asp/user/checkexisting.asp
Go
Support Central
What's New!
sony style VAIO
Welcome averab,Monday December 18, 2000
Current Issues
Here is a list of the current issues you have open in Support Central. Please take a moment to review these issues and click Close on those you have finished with.
If you want to continue your search on a particular issue click Resubmit on that issue or you may create a new issue by clicking on the Open New Issue button.
ID
Problem
Operator
Time Open
Resolution Notes
Function
137
How to Locate Your Serial Number
12/18/00 1:27:44 PM
Close Resubmit
138
Connecting Two VAIO Computers using i.LINK
12/18/00 1:28:39 PM
Close Resubmit
Open New Issue
VAIO Support Agent Installed
Privacy Policy
Powered by SUPPORT.COM
Done
Local intranet

When you log on to Support Central, the Current Issues page displays, enabling you to continue working on your open issues or to close them if you are finished. Support Central has a tracking feature that stores your current issues, enabling you to return and work on them later.

Support Central: Support Wizard page


Support Wizard - Microsoft Internet Explorer provided by SONY Electronics Inc.
Support Central
What's New!
sony style
VAIO
Support Wizard
Support Suite
Support Wizard
The Support Wizard will help you fix your problem or enable you to escalate your issue to a Sony Support Analyst.
Please choose from today's top support problems
1. How to Locate Your Serial Number
2. Requirements and Procedures to Upgrade Memory
3. Windows Locks Up When Trying to Shutdown
4. Connecting Two VAIO Computers using i.LINK
5. Windows is Running Slow
6. Does My Sony Notebook Support TV/Video Out
7. No Sound in Windows or Windows Applications
If you don't see something above that looks like your issue enter a description below.
Proceed
VAIO Support Agent Installed
Privacy Policy
Powered by SUPPORT.COM
Done
Local intranet

If you log on to Support Central with a new issue, or if you do not have any open issues, the Support Wizard appears. You can begin searching on the new issues.

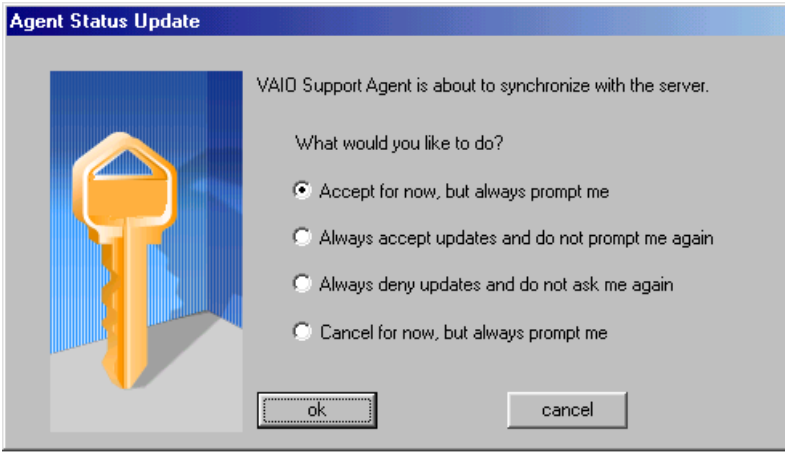
✍ You must be connected to the Internet to use Support Central.

About Automatic Updates

The VAIO Support Agent is dormant as a background process. Every 24 hours, the Agent self-activates to contact the Sony Support Server to check for new updates or fixes needed for your system. This updating action only occurs while you are connected to the Internet and when more than 24 hours has passed since the last update.

Each time the VAIO Support Agent prepares to check for updates, the Agent Status Update dialog box appears and asks you to respond, unless you have previously selected the option, “Always accept updates and do not prompt me again.”

Agent Status Update


Agent Status Update
VAIO Support Agent is about to synchronize with the server.
What would you like to do?
Accept for now, but always prompt me
Always accept updates and do not prompt me again
Always deny updates and do not ask me again
Cancel for now, but always prompt me
ok
cancel

You can choose from four response options:

- Give the Agent your permission to contact the Sony Support Server for any updates or fixes that are available specifically for your notebook. The Agent continues to prompt you for your permission to retrieve updates.
- Give the Agent your permission to contact the Sony Support Server for any updates or fixes that are available specifically for your notebook. The Agent automatically retrieves updates without further prompting.
- Deny the Agent your permission to contact the Sony Support Server for any updates or fixes. The Agent discontinues any update retrieval and does not prompt again for your permission to update.
- Deny the Agent your permission to contact the Sony Support Server for the current update or fix. The Agent discontinues the current update retrieval, but prompts again for your permission for the next scheduled update.

Update Notification

Once you have granted permission for the system to check for updates or fixes, the Agent contacts the Sony Support Server. Available updates or fixes may be displayed to you in one of two ways. An update or fix may be displayed in a window with an explanation and instructions to follow. Others will cause the ambulance icon on your task tray to blink. You should always check the ambulance icon in the task tray after the system checks for updates. If the icon is blinking, double-click the ambulance icon to view the update.

When clicking on the flashing ambulance icon, you must be connected to the Internet to receive an update.

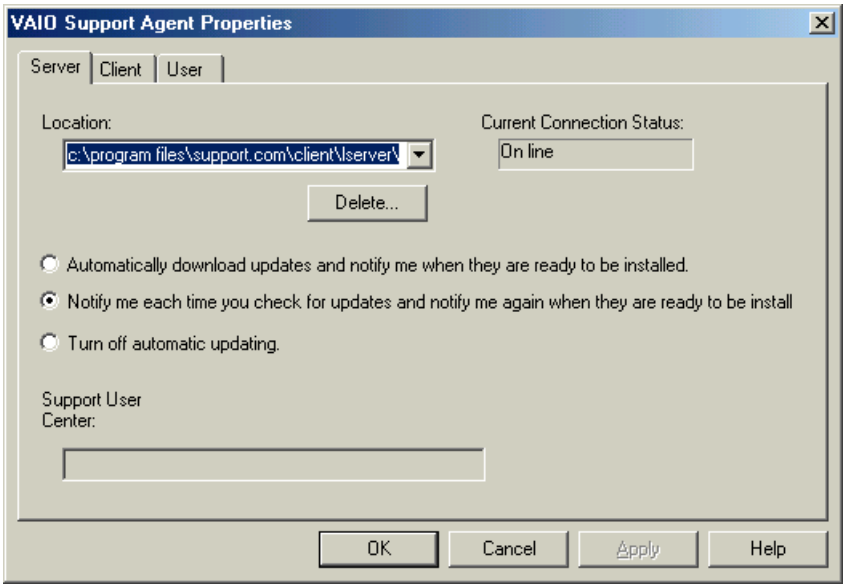
VAIO Support Agent Properties

To control the VAIO Support Agent automatic update feature, follow these steps:

1. In the VAIO Support Agent main screen, select Tools, then select Properties. The VAIO Support Agent Properties dialog box appears.
2. Select one of three options to customize the automatic update feature.

3 Click OK.

VAIO Support Agent Properties window



Troubleshooting

This section describes how to solve common problems you may encounter when using your notebook. Since many problems have simple solutions, try these suggestions before you contact Sony PC Support (http://www.sony.com/pcsupport).

Troubleshooting Your Notebook

(Windows Me only) When starting your notebook for the first time, the VAIO InitManager dialog box will appear. Please select "OK" to begin initial setup. If you do not execute the initial setup, you cannot use part of VAIO original hardware functions such as Jog Dial, Power Management tool, scroll function of touchpad, and keyboard shortcut key function combined with the Fn key.

My notebook does not start.

- Check that the notebook is plugged into a power source and that it is turned on. Check that the power indicator on the front panel of the notebook indicates that the power is on.
- Check that the battery packs are inserted properly and that they are charged.
- Make sure there is no diskette in the floppy disk drive.
- Confirm that the power cord and all cables are connected firmly, as described in "To Connect a USB Device" on page 48.
- If you plugged the notebook into a power strip or UPS, make sure the power strip or UPS is turned on and working.
- If you are using an external display, check that it is plugged into a power source and turned on. Check that the brightness and contrast controls are adjusted correctly. See the manual that came with your display for details.
- Moisture condensation may have occurred. Do not use the notebook for at least one hour and then turn on the notebook.
- Take the battery pack off the notebook, unplug the power cord and plug it again, then turn on the power.

My notebook starts, but my system doesn't start properly.

- When the internal backup battery is low on power, it may not start your system properly. The message "Press <F1> to resume, <F2> to setup" appears at the bottom of the screen. Follow these steps:
  1. Press F2. The BIOS Setup menu appears.
  2. Set the date (month/day/year). Press Enter.
  3. Press ↓ to select System Time, then set the time (hour: minute: second). Press Enter.
  4. Press → to select Exit, then press ↓ to select Get Default Values. The message "Load default configuration now?" appears.
  5. Select Yes and press Enter.
  6. Select Exit (Save Changes), and then press Enter. The message "Save Configuration changes and exit now?" appears.
  7. Select Yes, then press Enter. The notebook restarts.

My notebook starts, but the message "Operating system not found" appears and Windows does not start.

- Make sure there is no diskette in the floppy disk drive (non-bootable).
- If a non-bootable diskette is in the drive, follow these steps:
  1. Turn off the notebook, and then remove the diskette.
  2. Restart the notebook and confirm that Windows starts properly.
- If Windows still does not start, follow the steps below to initialize the BIOS:
  1. Remove any diskette from the floppy disk drive.
  2. Turn off the notebook.
  3. Remove any peripheral devices connected to the notebook.
  4. Turn on the notebook.
  5. Press the F2 key when the Sony logo appears. The BIOS setup menu screen appears.
  6. Press the directional arrow keys to select the Exit menu.

7 Press the arrow keys to select “Get Default Values” and then press Enter. The message “Load default configuration now?” appears.

8 Select Yes, then press Enter.

9 Use the directional arrow keys to select “Exit” (Save Changes), and then press Enter. The message “Save configuration changes and exit now?” appears.

10 Select Yes, then press Enter. The notebook restarts.

If your notebook continues to display the message “Operating system not found”, and Windows does not start, contact Sony Customer Support.

My notebook stops responding or does not shut down.

It is best to shut down your notebook using the Shut Down command on the Windows Start menu. Using other methods, including those listed here, may result in loss of unsaved data.

- Try restarting the notebook. On the Windows taskbar, click the Start button, click Shut Down, and then click Restart.
- If you cannot restart as described in the preceding step, you can restart the notebook by pressing Ctrl+Alt+Delete.
- If the previous step does not work, press and hold the power button for at least four seconds. This turns off the power.
- If your notebook stops responding while playing a CD, stop the CD, and restart the notebook by pressing Ctrl+Alt+Delete.
- Unplug the notebook from the AC adapter and remove the battery pack from your notebook.

✍ Pressing Ctrl+Alt+Delete or turning off the notebook with the power switch may result in data loss in files that are currently open.

My notebook does not enter the power saving mode I selected. (Windows Me only)

To enable your notebook to enter the power saving mode you select, proceed as follows:

1. Click Start, point to Program, point to Accessories, point to System Tools, then click System Information. The Help and Support window appears.
2. Click System Configuration Utility under the Tools menu.
3. Click the Advanced button on the General tab, and confirm the following information:
   - The message “Standby function is enabled” is displayed. If the message reads “Standby function is disabled”, click the Enable button.
   - The message “Hibernate feature is enabled” is displayed. If the message reads “Hibernate feature is disabled”, click the Enable button.
4. Click OK and restart your notebook.

My system enters System Idle mode when System Suspend mode has been selected.

- If you are connecting an optical disc drive with a PC card, disconnect it by stopping the PC card. Use the Sony Notebook Setup utility to disable devices that you are not currently using. See “Removing a PC card” for more information.
- Make sure the PC Card is compatible with your notebook’s Windows® operating system.

✍ (Windows 2000 only) When the notebook enters and returns from a power saving mode after removing the optical drive, the message “Unsafe Removal of Device” may appear and the device name is shown listed as Secondary IDE Channel. Click OK.

The Power Management setting is not responding.

Your notebook’s operating system may become unstable if a lower power state, such as system hibernation is initiated and then changed before the notebook completely enters the lower power state. To restore the notebook to its normal operating stability:

1 Close all open applications.

2 Push and hold the power button for four seconds or longer to shut down the notebook.

The sound of my notebook's fan is too loud.

Use the PowerPanel utility to change the Thermal Control Strategy setting to Quiet. This setting slows down the CPU speed. See PowerPanel Help for more information.

Troubleshooting the LCD Screen

My LCD screen is blank.

- Verify that the notebook is plugged into a power source and that it is turned on.
- Verify that the power indicator on the notebook is on.
- Verify that the battery pack(s) is inserted properly and that they are charged.
- The notebook may be in LCD (Video) Standby mode. Press any key to activate the screen.
- The display mode may be set to external display mode. Press and hold the Fn key while pressing F7 several times.

My LCD screen continues to show the previous screen. (Windows Me only)

Press the Windows key and D key twice to refresh the screen.

The image on my connected external display is not centered or sized properly.

Use the controls on your external display to adjust the image. See the manual that came with your display for more information.

I want to change the video resolution of my display.

1 Click Start, point to Settings, point to Control Panel, and then click the Display icon. The Display Properties dialog box appears.

2 Click on the Settings tab.

3 Move the Screen Area slider to change your video resolution.

Some screen areas cannot be displayed on the LCD.

If the display resolution of your notebook is greater than 1024 x 768 (Virtual display mode), some areas of the screen may not be displayed on the LCD depending on the color settings.

- If the setting is 256 colors, then all areas of the screen are properly displayed.
- If the setting is High color (16 bit), then 8 lines on the bottom of the screen and 32 lines on the right side of the screen are not displayed.
- If the setting is High color (32 bit), then 8 lines on the bottom of the screen are not displayed.

Some screen areas cannot be displayed on the external display.

1. Click the Start button on the taskbar, point to Settings, point to Control Panel, and then click Display. The Display Properties window appears.
2. Click the Settings tab, then click the Advanced button. The S3 Inc. Savage/IX Display Driver Properties dialog box appears.
3. Click the S3DuoVue tab.
4. Uncheck the LCD box and click OK. The Display Properties window appears.
5. Click Close, then restart your notebook with the external display connected to your notebook. Turn on any connected peripheral devices, such as an external display, before turning on the notebook.

Troubleshooting the Mouse and Touchpad

My mouse does not work

- If you are using an external mouse, verify that the mouse is plugged into the mouse connector. See “Connecting a Universal Serial Bus (USB) Device” for details.
- If you are using an optional Sony USB mouse PCGA-UMS1 series, verify that the mouse is plugged into the USB connector, and restart your notebook.

My touchpad does not work properly.

- You may have disabled the touchpad without connecting a mouse to the notebook. To enable the touchpad:
  1. Click Start > Programs > Sony Notebook Setup.
  2. Select the Touchpad tab.
  3. Click Use touchpad and click OK.
- If your touchpad is interpreting a single tap as a double-click, adjust the button assignments as follows:
  1. Click Start, point to Control Panel, then double-click on the Mouse icon. The Mouse Properties dialog box appears.
  2. Change the button assignments in the Mouse Properties dialog box. (One of the buttons is assigned to the double-click action.)

The pointer does not move while using the touchpad or mouse.

Click the Start button on the Windows taskbar, select Shut Down to display the Shut Down Windows dialog box, then press Enter.

- (Windows Me)
  If you cannot turn off your notebook as described in the step above, press Ctrl+Alt+Delete twice to restart the notebook.
  (Windows 2000)
  If you cannot turn off your notebook as described in the step above, press Ctrl+Alt+Delete and click Shut Down on the Windows Security screen to restart the notebook.
- If you cannot restart your notebook as described in the step above, press and hold the power button for more than four seconds to turn off the notebook.
- If the pointer does not move while playing a disc, press Ctrl+Alt+Delete to stop playback and restart the notebook.

Troubleshooting Drives, PC Cards, and Peripheral Devices

My (optional) floppy disk drive can not write to a floppy disk

- If the floppy disk is write-protected, disable the write-protect feature or use a floppy disk that is not write-protected.
- Verify that the floppy disk is properly inserted into the floppy disk drive.

My (optional) floppy disk drive icon doesn't appear even though it is connected.

- Click Start, point to Settings, point to Control panel, then click System.

  The System Properties dialog box appears.
- Click the Device Manager tab.
- Double-click Floppy Disk Controller, then click Standard Floppy Disk Controller.
- Click Delete. The Confirmation window will appear.
- Verify that Delete From All Settings is selected and press OK.
- Click Update in the System Properties window.
- Double click Disk Drive and confirm that GENERIC NEC FLOPPY DISK is shown.

My CD-ROM drive is not playing my CD properly.

- Make sure the label of the disc is facing up.
- If the disc requires software, make sure the software is installed according to the manufacturer's instructions.
- A dirty or damaged disc may cause the notebook to stop responding while it tries to read the disc. If necessary, restart the notebook, remove the disc, and then check it for dirt or damage.
- If you are using an optional DVD Rom Drive, and can see video but not hear audio, check all of the following:
  - Check that your DVD-ROM drive does not have the mute setting enabled.
  - Check the volume setting in the audio mixer.

- If you are using external speakers, check the volume settings, then check the connections between your external speakers and the notebook.
- Click Start, point to Settings, point to Control panel, then double-click System. The System Properties dialog box appears.
- Click the Device Manager tab.
- Verify that the correct drivers are installed properly.

- Do not use adhesive labels to identify the CD. The label may come off while the disc is in use in the optical drive and cause the drive to malfunction.
- Moisture condensation may have occurred. Leave the notebook idle for at least 1 hour with the notebook turned on.

My optical drive tray does not open.

- Make sure the notebook is turned on.
- Press the Eject button on the optical drive.
- If the Eject button does not work, open the tray by inserting a thin pen tip in the hole to the right of the Eject button.

I cannot use digital video (DV) devices. The message "DV equipment seems to be disconnected or turned off" appears.

- Verify that the DV device is turned on and that the cables are properly connected.
- If you are using multiple i.LINK devices, the combination of the connected devices may cause unstable operation. In this case, proceed as follows:

1. Turn off your notebook and all connected devices.
2. Disconnect the devices that are not in use.
3. Ensure that all other devises are properly connected.
4. Restart your notebook.

The i.LINK-compatible devices connected to my notebook do not work.

- Use the i.LINK connector that is located on your notebook.

- If the message “There are no Digital Video devices connected to this computer, or the power is off” appears, unplug the i.LINK cable and try plugging it in again.

My PC card is not working.

- Make sure the PC card is compatible with Microsoft® Windows®.
- Use the Sony Notebook Setup utility to disable devices you are not currently using.
- If you are using two PC cards, use the Sony Notebook Setup utility to disable the devices you are not currently using.

Troubleshooting Software

My software program stops responding or crashes.

Contact the software publisher or designated provider for technical support. See Software Support Information.

When I click an application icon, the message “You must insert the application CD into your optical drive” appears and the software does not start.

- Some titles require specific files that are located on the application CD. Insert the disc and try starting the program again.
- Make sure you place the CD in the tray with the label side facing up.

I can not use the DVgate software.

If your notebook is using the Ultimate Battery Life profile for its power saving mode, you cannot use DVgate or Smart Connect software. You must select another profile.

My voice-related software does not work properly.

- Disable the microphone echo function as follows:
  1. Click Start, point to Settings, then point to Control Panel.
  2. Click Yamaha DS-XG.
  3. Click the Echo tab and remove the checkmark. Click OK.
- Contact the software publisher or designated provider for technical support

Troubleshooting the Modem

My modem does not work

- Verify that the phone line is plugged into the line jack. See “Using a Phone Line” for details.
- Verify that the phone line is working properly by plugging the line in an ordinary phone and listening for a dial tone.
- Verify that the phone number the program is dialing is correct.
- Verify that the software you are using is compatible with the notebook’s modem. (All preinstalled Sony programs are compatible.)

My modem connection is slow.

Your notebook is equipped with a 56K/V.90 compatible modem. Many factors may influence modem connection speed, including telephone line noise or compatibility with telephone equipment (such as fax machines or other modems). If you think your modem is not connecting properly to other PC-based modems, fax machines, or your Internet Service Provider, proceed as follows:

- Have your phone company check that your phone line is free from any line noise.
- If your problem is fax-related, check that there are no problems with the fax machine you are calling and that it is compatible with fax modems.
- If you are having a problem connecting with your Internet Service Provider, check that the ISP is not experiencing technical problems.
- If you have a second phone line available, try connecting the modem to that line.

Troubleshooting Audio

My speakers have no sound

- If the built-in speakers are turned off, press Fn+F3 or use the Jog Dial control to turn on the speakers.
- If the speaker volume is turned to the minimum, press Fn+F4, then press ↑ or → to increase the volume or you can use the Jog Dial control to control the volume.
- If nothing is displayed when you press Fn+F3 or Fn+F4, proceed as follows:
  1. Click Start, point to Settings, point to Control panel, then double-click System. The System Properties dialog box appears.
  2. Click the Device Manager tab.
  3. Set the sound device to enable.
- If your notebook is powered by batteries, verify that the battery packs are inserted properly and that they are charged.
- If you are using an application that has its own volume control, verify that the volume is turned up.
- Check the volume controls in Windows®.
- If you connect external speakers:
  1. Verify that the speakers are properly connected and the volume is turned up.
  2. If the speakers have a mute button, make sure the button is off.
  3. If the speakers are powered by batteries, verify that the batteries are inserted properly and that they are charged.
- If you have connected an audio cable to the Headphone connector, disconnect the cable.

My microphone does not work.

If you are using an external microphone, verify that the microphone is plugged into the Microphone connector. See ““Recording from a Microphone or Audio Equipment”” on page 41 for details.

Troubleshooting the Printer

I cannot print

- The default setting for the printer port mode is correct for most printers. If you cannot print, try changing the printer port mode. In Sony Notebook Setup, select the Printer tab. If the printer port mode is set to ECP, change it to bi-directional. If the printer port mode is set to bi-directional, change it to ECP. See "Displaying the Sony Notebook Setup Screen" for details on using Sony Notebook Setup.
- Your connected printer may not function after the notebook resumes from a power saving mode. If this occurs, proceed as follows to reset the printer connection:
  - **Windows ® Me Only**
    1. Right-click My Computer icon on the desktop and select Properties.
    2. Click the Device Manager tab.
    3. Select Refresh, then click OK. The printer should function properly.
  - **Windows ® 2000 Only**
    1. Click My Computer icon on the desktop, then click on the Control Panel folder.
    2. Click on the Printers folder.
    3. Right-click on the icon of the printer that is malfunctioning, then select Properties to access the Properties window.
    4. Click OK to close the Properties window. The printer should function properly.

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